

City of Tacoma Comments

May 2006

Draft

Phase I Municipal Stormwater NPDES and State Waste  
Discharge General Permit

February 15, 2006

Permit No. \_\_\_\_\_

Coverage Date \_\_\_\_\_

Issuance Date:

Effective Date:

Expiration Date:

National Pollutant Discharge Elimination System and  
State Waste Discharge General Permit for Discharges  
from Large and Medium Municipal Separate Storm Sewer Systems

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY  
OLYMPIA, WASHINGTON 98504-7600

In compliance with the provisions of  
The State of Washington Water Pollution Control Law  
Chapter 90.48 Revised Code of Washington  
and  
The Federal Water Pollution Control Act  
(The Clean Water Act)  
Title 33 United States Code, Section 1251 et seq.

Until this permit expires, is modified, or revoked, Permittees that have properly obtained coverage under this permit are authorized to discharge to waters of the state in accordance with the special and general conditions which follow.

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Dave C. Peeler  
Water Quality Program Manager  
Department of Ecology

## TABLE OF CONTENTS

S1.	PERMIT COVERAGE AND PERMITTEES .....	1
S2.	AUTHORIZED DISCHARGES.....	3
S3.	RESPONSIBILITIES OF PERMITTEES, CO-PERMITTEES, AND SECONDARY PERMITTEES .....	4
S4.	COMPLIANCE WITH STANDARDS .....	5
S5.	STORMWATER MANAGEMENT PROGRAM.....	6
	• <u>[Include all of the subheadings under S5 in the table of contents. This section contains much of the “meat” of the permit, yet the various program items aren’t even listed in the table of contents.]</u>	
S6.	STORMWATER MANAGEMENT PROGRAM FOR CO-PERMITTEES AND SECONDARY PERMITTEES .....	30
S7.	TOTAL MAXIMUM DAILY LOAD ALLOCATIONS .....	42
S8.	MONITORING.....	42
S9.	REPORTING REQUIREMENTS .....	57
G1.	DISCHARGE VIOLATIONS .....	59
G2.	PROPER OPERATION AND MAINTENANCE.....	59
G3.	NOTIFICATION OF SPILL.....	59
G4.	BYPASS PROHIBITED.....	59
G5.	RIGHT OF ENTRY .....	60
G6.	DUTY TO MITIGATE.....	60
G7.	PROPERTY RIGHTS.....	60
G8.	COMPLIANCE WITH OTHER LAWS AND STATUTES.....	60
G9.	MONITORING.....	60
G10.	REMOVED SUBSTANCES .....	62

G11. SEVERABILITY .....	62
G12. REVOCATION OF COVERAGE.....	62
G13. TRANSFER OF COVERAGE .....	62
G14. GENERAL PERMIT MODIFICATION AND REVOCATION .....	63
G15. REPORTING A CAUSE FOR MODIFICATION OR REVOCATION .....	63
G16. APPEALS .....	63
G17. PENALTIES .....	64
G18. DUTY TO REAPPLY .....	64
G19. CERTIFICATION AND SIGNATURE .....	64
G20. RECORDS RETENTION.....	65
G21. NON-COMPLIANCE NOTIFICATION .....	65
DEFINITIONS AND ACRONYMS .....	66
APPENDIX 1. Minimum Technical Requirements for New Development and Redevelopment	
APPENDIX 2. TMDL Requirements	
APPENDIX 3. Annual Report Form for Permittees	
APPENDIX 4. Annual Report Form for Secondary Permittees and Co-Permittees	
APPENDIX 5. Notice of Intent	
APPENDIX 6. Street Waste Disposal	
APPENDIX 7. Determining Construction Site Sediment Damage Potential	
APPENDIX 8. Urban Land Uses and Pollutant Generating Sources	

[Please include a running “footer” on each page so a person knows where they are within the permit. This is very important! It will help make the permit easier to use.]

Conventions used for comments and edits

- All comments are bracketed and shown in blue, bold, underlined font.
- All suggested edits are shown in red strikeout and blue font format.

## **SPECIAL CONDITIONS**

### **S1. PERMIT COVERAGE AND PERMITTEES**

[All permit requirements for Phase I and Phase II **Permittees** should be the same, especially with respect to thresholds for treatment and flow control and coordination with other **Permittees**.]

[In addition, Ecology should consider expanding the permit coverage to at least all of the municipalities that discharge stormwater to the Puget Sound Basin in order to protect water quality throughout Puget Sound.]

#### **A. Permit Coverage Area**

This permit covers *discharges* from Large and Medium Municipal Separate Storm Sewer Systems (MS4s) as established at Title 40 *CFR* 122.26, except for municipal separate storm sewers (MS3s) owned or operated by the Washington State Department of Transportation. Large and medium MS4s include all MS3s located within cities or counties required to have permit coverage.

#### **B. The following entities had coverage under a previous municipal *stormwater* permit and reapplied for coverage. Their coverage date under this permit begins on the effective date of this permit. These entities are covered under this permit as Permittees:**

- The City of Seattle
- The City of Tacoma
- King County
- Snohomish County
- Pierce County
- Clark County

[Please clarify the status of facilities that a Phase I municipality owns that are located within another Phase I municipality. The way the permit is currently written, these facilities could be seen as secondary **Permittees**. The permit should clarify that these facilities should be regulated under the municipal stormwater permit of the Phase I municipality that owns them, not under the Phase I or II permit of the municipality in which they are located.]

Suggested verbiage: This permit covers the above mentioned entities and also includes under their permit coverage all facilities that they own that are located within other Phase I or Phase II municipalities.

C. King County had coverage under a previous municipal stormwater permit, as a *Co-Permittee* with the City of Seattle, and reapplied for coverage. Their coverage date under this permit begins on the effective date of this permit. King County is covered as a Co-Permittee with the City of Seattle for discharges it owns or operates in the City of Seattle.

D. Upon application and coverage in accordance with Special Condition S1.F, the following entities are covered under this permit as *Secondary Permittees*:

1. Port of Seattle, excluding Seattle-Tacoma International Airport
2. Port of Tacoma
3. Drainage, diking, flood control, or diking and drainage districts located in the Cities or unincorporated portions of the Counties listed in S1.B., above, which own or operate municipal separate storm sewers serving non-agricultural land uses.
4. Other owners or operators of municipal separate storm sewers located in the Cities or unincorporated portions of the Counties listed in S1.B., above. This needs to be clarified. Use the same definition in the permit. Provide more information about who is covered under this section.

E. Unless otherwise noted, the term “Permittee” shall include Permittee, Co-Permittee, and Secondary Permittee, as defined above in Special Conditions S1.B., S1.C. and S1.D.

F. Coverage for Secondary Permittees

1. To obtain coverage under this permit, each secondary Permittee identified under Special Condition S1.D shall either:
  - a. Submit a *Notice of Intent* (NOI) and provide public notice of the application for coverage in accordance with WAC 173-226-130. The NOI shall constitute the application for coverage. Ecology will notify applicants in writing of their status concerning coverage under this permit within 90 days of Ecology's receipt of the NOI and demonstration that the public notice requirements have been met.
  - OR
  - b. Submit a co-application jointly with a Permittee named in S1.B. and provide public notice of the application for coverage in accordance with WAC 173-226-130. The co-application shall consist of an amendment to the Phase I Part 1 and Part 2 permit applications. Ecology will notify applicants in writing of their status concerning coverage under this permit within 90 days of Ecology's receipt of the NOI and demonstration that the public notice requirements have been met.

2. NOIs and co-applications shall be submitted to:

Department of Ecology  
 Water Quality Program  
 Municipal Stormwater Permit Program  
 P.O. Box 47696  
 Olympia, WA 98504-7696

## **S2. AUTHORIZED DISCHARGES**

A. This permit authorizes the discharge of stormwater to surface waters and to ground waters of the state from municipal separate storm sewers owned or operated by each Permittee covered under this permit in the geographic area covered by this permit pursuant to S1.A, subject to the following limitations:

1. All discharges into and from municipal separate storm sewers owned or operated by Permittees must be in compliance with this permit.
2. Discharges from municipal separate storm sewers constructed after the effective date of this permit must receive all applicable state and local permits and use authorizations, including compliance with Ch. 43.21C RCW (the State Environmental Policy Act).
3. Discharges to ground waters of the state through facilities regulated under the Underground Injection Control (UIC) program, Chapter 173-218 WAC, are not covered under this permit.
4. Discharges to ground waters not subject to regulation under the federal *Clean Water Act* are covered in this permit only under state authorities, Chapter 90.48 RCW, the Water Pollution Control Act

B. This permit authorizes discharges of *stormwater associated with industrial and construction activity* and *process wastewater* discharges from municipal separate storm sewers owned or operated by the Permittee to waters of the state only under the following conditions:

1. Stormwater associated with construction or industrial activity, as defined by 40CFR122.26, must be authorized by a separate individual or general *National Pollutant Discharge Elimination* (NPDES) permit; or
2. Process wastewater must be authorized by another NPDES permit.

C. This permit authorizes discharges from emergency fire fighting activities ~~Delete the rest of the sentence from this point forward. Fire fighting activities are done on an emergency basis to protect life and property. The protection of water quality is of secondary concern during a fire~~ unless the discharges from fire fighting activities are identified as significant sources of pollutants to waters of the State.

D. This permit does not authorize any other illicit or non-stormwater discharges except as provided in Special Condition S5.C.8 or S6., nor does it relieve entities responsible for illicit discharges, including spills of oil or hazardous substances, from responsibilities

and liabilities under state and federal laws and regulations pertaining to those discharges.

[Section D in the 1995 permit stated that the permit did not authorize discharges to waters on trust lands of the Puyallup Tribe. This language is now missing. Does this imply that any discharges we make into the Puyallup River in sections controlled by the Tribe are authorized by this permit? Why was this section taken out? Are other tribes now delegated as well, and do they need to be included in the permit? The language in the 1995 permit is adequate for this distinction.]

### **S3. RESPONSIBILITIES OF PERMITTEES, CO-PERMITTEES, AND SECONDARY PERMITTEES**

A. Each Permittee, Co-Permittee and Secondary Permittee is responsible for compliance with the terms of this permit for the municipal separate storm sewers it owns or operates.

1. Each Permittee, as listed in S1.B., is required to comply with all conditions of this permit, except for S6., *Stormwater management program* for Co-Permittees and Secondary Permittees.

2. Each Co-Permittee and Secondary Permittee, as defined in S1.C. and S1.D., is required to comply with all conditions of this permit, except for Special Condition S5., *Stormwater management program* for Permittees. This provision includes Secondary Permittees that co-apply under Special Condition S1.F.1.b.

B. Permittees may rely on another *entity* to meet one or more of the requirements of this permit, if the other entity, in fact, implements the control measure, and agrees to implement the control measure on the Permittee's behalf. Permittees that are relying on another entity to satisfy one or more of their permit obligations remain responsible for permit compliance if the other entity fails to implement the permit conditions. Where permit responsibilities are shared they must be documented as follows:

1. Permittees and Co-Permittees that are continuing coverage under this permit must submit a statement that describes the permit requirements that will be implemented by other entities. The statement must be signed by all participating entities. There is no deadline for submitting such a statement, provided that this does not alter implementation deadlines.

2. Secondary Permittees must submit an NOI that describes which requirements they will implement and identify the entities that will implement the other permit requirements in the area served by the secondary Permittee's MS4. A statement confirming the shared responsibilities, signed all participating entities, must accompany the NOI. [This signed agreement is due before the permit is issued. Suggest allowing at least a year after the permit is issued before the agreement is due. Additional time is needed to allow governments to establish agreements and pass them before elected officials i.e. City and County Councils etc.] Secondary Permittees may amend their NOI, during the term of the

1 permit, to establish, terminate, or amend shared responsibility arrangements,  
2 provided this does not alter implementation deadlines.

- 3 C. Unless otherwise noted, all appendices to this permit are incorporated by this reference  
4 as if set forth fully within this permit. [Add order of precedence to define how  
5 various sections of the permit relate to each other.]

#### 6 **S4. COMPLIANCE WITH STANDARDS**

- 7 A. In accordance with RCW 90.48.520, the discharge of toxicants to waters of the state of  
8 Washington which would violate any *water quality standard*, including toxicant  
9 standards, sediment criteria, and dilution zone criteria is prohibited.

10 [We agree with the comments developed by King County for this section that  
11 address the use of RCW 90.48.520 in this draft permit. Tacoma also thinks that  
12 these requirements do not belong in this permit. This is a major change in policy  
13 that should not be addressed through this permit. If Ecology wants to require  
14 treatment of stormwater similar to the treatment of sewage at publicly owned  
15 treatment works, or POTWs, this policy change needs to be addressed through a  
16 change in state law. We would like to have Ecology address why this RCW is  
17 included in the municipal stormwater permit.]

- 18 B. This permit does not authorize a violation of Washington State surface water quality  
19 standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200  
20 WAC), sediment management standards (chapter 173-204 WAC), or human health-  
21 based criteria in the national Toxics Rule (Federal Register, Vol. 57, NO. 246, Dec. 22,  
22 1992, pages 60848-60923).
- 23 C. The Permittee shall reduce the discharge of pollutants to the *maximum extent*  
24 *practicable* (MEP).
- 25 D. The Permittee shall use *all known, available, and reasonable methods of prevention,*  
26 *control and treatment* (AKART) to prevent and control pollution of waters of the state  
27 of Washington.
- 28 E. In order to meet the goals of the Clean Water Act, to demonstrate compliance with  
29 S4.C and S4.D, and make progress towards compliance with applicable surface water,  
30 ground water and sediment management standards, each Permittee shall comply with  
31 the requirements of this permit.
- 32 F. Ecology may modify or revoke and reissue this *general permit* in accordance with  
33 General Condition G14. GENERAL PERMIT MODIFICATION AND  
34 REVOCATION, if Ecology becomes aware of additional control measures,  
35 management practices or other actions beyond what is required in this permit, that are  
36 necessary to:
- 37 1. Reduce the discharge of pollutants to the MEP;
  - 38 2. Comply with the state AKART requirements; or
  - 39 3. Control the discharge of toxicants to waters of the state of Washington.

## 1 S5. STORMWATER MANAGEMENT PROGRAM

2 A. Each Permittee shall implement a Stormwater Management Program (SWMP) during  
3 the term of this permit. For the purpose of this permit a stormwater management  
4 program is a set of actions comprising the *components* listed in S5.B., S5.C.1 through  
5 S5.C.10., and additional actions and activities, where necessary, to meet the  
6 requirements of *applicable TMDLs*.

7 1. Each Permittee shall prepare written documentation of their SWMP and submit it to  
8 Ecology in written and electronic formats with the first year annual report, in  
9 accordance with the requirements in S9 Reporting Requirements. The  
10 documentation of the SWMP shall be organized according to the program  
11 components in S5.C., and shall be updated annually. The SWMP documentation  
12 shall include a description of each of the program components included in S5.C,  
13 and any additional actions necessary to meet the requirements of applicable  
14 TMDLs. [We would like to have Ecology review and approve the SWMP for  
15 each Permittee. An approval process ensures that we are implementing our  
16 program correctly. It would also help to protect us from third party lawsuits  
17 in which someone could claim that our program is not adequate to meet the  
18 requirements of the permit.]

19 2. Each Permittee shall track the cost of development and implementation of the  
20 SWMP required by this section. This information shall be included in the annual  
21 report.

22 3. Each Permittee shall track the number of inspections, official enforcement actions  
23 and types of public education activities as stipulated by the respective program  
24 component. This information shall be included in the annual report.

25 B. The SWMP shall be designed to reduce the discharge of pollutants from MS4s to the  
26 maximum extent practicable, meet state AKART requirements, and protect water  
27 quality.

28 Permittees are to continue implementation of existing stormwater management  
29 programs until they begin implementation of the updated stormwater management  
30 program in accordance with the terms of this permit, including implementation  
31 schedules.

32 C. The SWMP shall include the components listed below. All components are mandatory  
33 and must be implemented by each Permittee within the limits of state and federal law.  
34 The requirements of the stormwater management program shall apply to municipal  
35 separate storm sewers and areas served by municipal separate storm sewers owned or  
36 operated by each Permittee. Co-Permittees and Secondary Permittees are responsible  
37 for implementation of Stormwater Management Programs as indicated in Special  
38 Condition S6.

39 1. Legal Authority

40 a. No later than the effective date of this permit, [All references to items due as  
41 of the adoption date of the permit must be modified to incorporate

reasonable time frames for due dates after issuance of the permit.] [Note that any/all municipal agreements require legal review and Council approval. This process can take several months which is why we believe the time frame is too short.] Each Permittee must be able to demonstrate that they can operate pursuant to legal authority which authorizes or enables the Permittee to control discharges to and from municipal separate storm sewers owned or operated by the Permittee.

- b. This legal authority, which may be a combination of statute, ordinance, permit, contracts, orders, interagency agreements, or similar means, shall authorize or enable the Permittee, at a minimum, to:
  - i. Regulate Control~~[Not feasible to totally control.]~~ the contribution of pollutants to municipal separate storm sewers owned or operated by the Permittee from stormwater discharges associated with industrial activity, and regulate control the quality of stormwater discharged from sites of industrial activity;
  - ii. Prevent Prohibit~~[Not feasible to totally prohibit.]~~ illicit discharges to the municipal separate storm sewer owned or operated by the Permittee;
  - iii. Regulate Control the discharge of spills and the dumping or disposal of materials other than stormwater into the municipal separate storm sewers owned or operated by the Permittee;
  - iv. Regulate Control through interagency agreements among co-applicants, the contribution of pollutants from one portion of the municipal separate storm sewer system to another portion of the municipal separate storm sewer system; [All references to items due as of the adoption date of the permit must be modified to incorporate reasonable time frames for due dates after issuance of the permit.]
  - v. Require compliance with conditions in ordinances, permits, contracts, or orders; and,
  - vi. Within the limitations of state law, carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and non-compliance with permit conditions, including the prohibition on illicit discharges to the municipal separate storm sewer and compliance with local ordinances.

## 2. Municipal Separate Storm Sewer System Mapping and Documentation

- a. The SWMP shall include an ongoing program for mapping and documenting the MS4.
- b. Minimum performance measures. The information and its form of retention shall include:
  - i. No later than two years from the effective date of this permit each Permittee shall map all known municipal separate storm sewer *outfalls* and receiving

waters, and structural stormwater BMPs owned, operated, or maintained by the Permittee.

- ii. No later than four years from the effective date of this permit each Permittee shall map the attributes listed below for all storm sewer outfalls with a 24 inches nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems. For Counties, the mapping shall be done within *urban/higher density rural sub-basins*. For Cities, the mapping shall be done throughout the City.

- (1) Tributary conveyances (indicate type, material, and size where known);

- (2) Associated drainage areas; and

- (3) Land use.

- iii. Each Permittee shall initiate a program to develop and maintain a map of all connections to the municipal separate storm sewer authorized or allowed by the Permittee after the effective date of this permit.

- iv. Each Permittee shall map existing connections over 8" to municipal separate storm sewers tributary to all storm sewer outfalls with a 24" inches nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems, according to the following schedule:

City of Seattle and City of Tacoma: Two years after the effective date of this permit

Snohomish, King, Pierce and Clark Counties: One-half the area of the County within urban/higher density rural subbasins four years after the effective date of this permit.

- v. No later than four years from the effective date of this permit each Permittee shall map geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface water. [\[Please clarify what this means, i.e., does it mean infiltration systems, public systems?\]](#)

- vi. Each Permittee shall make available to Ecology, upon request, available maps depicting the information required in S5.C.2b.i. through v., above. The preferred format of submission will be an electronic format with fully described mapping standards. An example description is provided at <http://www.ecy.wa.gov/services/gis/data/standards.htm> where the preferred standards are described. Notification of updated GIS data layers shall be included in annual reports.

- vii. Upon request, and to the extent appropriate, Permittees shall provide mapping information to Co-Permittees and Secondary Permittees.

### 3. Coordination

[\[Requiring written formal intergovernmental coordination would require a large amount of staff time that should be more effectively spent achieving](#)

other permit requirements. No legal mechanism exists to require this type of coordination. Intergovernmental coordination may be encouraged by the permit, but it should not be required. Tacoma already coordinates with the other Phase I municipalities on permit issues and concerns. Tacoma also cooperates with our neighboring municipalities and with the Puyallup Tribe to respond effectively to flooding issues, illicit discharges and spills, capital improvement projects, participate in watershed council meetings and work on other cross boundary issues as needed.]

a. The SWMP shall include coordination mechanisms among entities covered under a municipal stormwater NPDES permit to encourage coordinated stormwater-related policies, programs and projects within a watershed. The SWMP shall also include coordination mechanisms among departments within each jurisdiction to eliminate barriers to compliance with the terms of this permit.

b. Minimum Performance Measures:

i. No later than 12 months [12 months is not feasible, should be at least 24 months] after the effective date of this permit, establish, in writing, and begin implementation of, intragovernmental (internal) coordination agreement to facilitate compliance with the terms of this permit.

ii. No later than 12 months [12 months is not feasible, should be at least 24 months] after the effective date of this permit, establish, in writing, and begin implementation of, intergovernmental coordination procedures on stormwater management, including

- Coordination mechanisms clarifying roles and responsibilities to for the control of pollutants between *physically interconnected* MS3s of the Permittee and any other Permittee covered by a municipal stormwater permit.
- Coordinating stormwater management activities, for *shared waterbodies*, among Permittees, to avoid conflicting plans, policies and regulations.
- Coordination necessary to develop an integrated monitoring program.

4. Public Involvement and Participation

a. The SWMP shall provide ongoing opportunities for public involvement in the Permittee's stormwater management program and implementation priorities.

b. Minimum performance measures:

i. No later than six months [six months is not enough time, should be 12 to 18 months] after the effective date of this permit, develop and begin implementing a process to create opportunities for the public to participate ~~in an advisory role~~ in the ~~decision-making~~ processes involving the development, implementation and update of the Permittee's SWMP. Each Permittee must develop and implement a process for consideration of public comments on their SWMP.

- 1           ii. Each Permittee must make their SWMP, the SWMP documentation required  
2           under S5.A.1. and all submittals required by this permit, including annual  
3           reports, available to the public, starting with the first annual report, on the  
4           permittee's website or submitted in electronic format to Ecology for posting  
5           on Ecology's website.

6           5. Controlling Runoff from New Development, Redevelopment and Construction Sites

- 7           a. The SWMP shall include a program to minimize or reduce prevent [Not totally  
8           feasible to prevent.] and control the impacts of runoff from new development,  
9           redevelopment, and construction activities. The program shall apply to private  
10          and public development, including roads.
- 11          b. Minimum performance measures:
- 12           i. The Minimum Requirements, thresholds, and definitions in Appendix 1, or  
13           Minimum Requirements, thresholds, and definitions determined by Ecology  
14           to be equivalent to Appendix 1.), for new development, redevelopment, and  
15           construction sites must be included in ordinance or other enforceable  
16           documents adopted by the local government. Adjustment and variance  
17           criteria equivalent to those in Appendix 1 must be included. More stringent  
18           requirements may be used, and/or certain requirements may be tailored to  
19           local circumstances through the use of basin plans or other similar water  
20           quality and quantity planning efforts. Such local requirements and thresholds  
21           must provide equal protection of receiving waters and equal levels of  
22           pollutant control as compared to Appendix 1.
- 23           ii. The local requirements must include a site planning process [Define site  
24           planning process.] and BMP selection and design criteria that, when used to  
25           implement the minimum requirements in Appendix 1 (or equivalent  
26           requirement approved by Ecology), will protect water quality, reduce the  
27           discharge of pollutants to the maximum extent practicable, and satisfy the  
28           state requirement under chapter 90.48 RCW to apply all known, available,  
29           and reasonable methods of prevention, control and treatment (AKART) prior  
30           to discharge. Permittees must document how the criteria and requirements  
31           will protect water quality, reduce the discharge of pollutants to the maximum  
32           extent practicable, and satisfy the state AKART requirements.
- 33           Permittees who choose to use the site planning process, and BMP selection  
34           and design criteria in the 2005 *Stormwater Management Manual for Western*  
35           *Washington*, or an equivalent manual approved by the Department, may cite  
36           this choice as their sole documentation to meet this requirement.
- 37           iii. The program must allow non-structural preventive actions and source  
38           reduction approaches such as *Low Impact Development Techniques (LID)*,  
39           measures to minimize the creation of impervious surfaces, and measures to  
40           minimize the disturbance of soils and vegetation.
- 41           iv. Deadlines for and Review of Local Manual and Ordinances. No later than 12  
42           24 months [This may not be enough time to implement the code changes.

Suggest using 24 months.] from the effective date of this permit, each Permittee must adopt a local program that meets the requirements in S5C.5.b.i through iii., above. Ecology review and approval of the local manual and ordinances is required. To ensure compliance with the 4224 month deadline, Permittees may use the following review process:

- (1) The Permittee submits draft enforceable requirements, technical standards and manual to Ecology no later than 812 months after the effective date of this permit. Ecology will review and provide written response to the Permittee.
- (2) If this review process is followed, the deadline for adoption of enforceable requirements, technical standards and manual shall be automatically extended by the number of calendar days that Ecology exceeds a 60 day period for written response.
- (3) In the case of circumstances beyond the Permittee's control, such as litigation or administrative appeals, that may result in noncompliance with the requirements of this section, the Permittee shall promptly notify Ecology and submit a written request for an extension. Extensions may be granted by Ecology.

v. No later than 12 months after the effective date of this permit, the program must establish legal authority to inspect private stormwater facilities and enforce maintenance standards for all new development and redevelopment approved under the provisions of this section.

vi. No later than 4824 months after the effective date of this permit, the program must include a process of permits, plan review, inspections, and enforcement capability to meet the following standards for both private and public projects, using *qualified personnel*:

- (1) Review all stormwater site plans for proposed development involving land disturbing activity that meet the thresholds in S5.C.5.b.i., above.
- (2) Inspect prior to clearing and construction, [Include more detail regarding what will be reviewed during this inspection.] all development sites that have a high potential for sediment transport as determined through plan review based on definitions and requirements in Appendix 7.
- (3) Inspect all permitted development sites involving land disturbing activity that meet the thresholds in S5.C.5.b.i., above, during construction to ensure proper installation and maintenance of required erosion and sediment controls. Enforce as necessary based on the inspection.
- (4) Inspect all development sites upon completion of construction and prior to final approval/occupancy to ensure proper installation of permanent erosion controls and stormwater facilities/BMPs. Enforce as necessary

based on the inspection. Also, require the developer to submit complete  
a maintenance plan and assign responsibility for maintenance.

(5) Compliance with the inspection requirements of S5.C.5.(b)vi.(2), (3),  
and (4), above shall be determined by the presence of an established  
inspection program designed to inspect all sites involving land  
disturbing activity that meet the thresholds in S5.C.5.b.i., above, and  
achieve inspection of 95% of permitted sites.

(6) The program shall include a procedure for keeping records of  
inspections and enforcement actions by staff, including inspection  
reports, warning letters, notices of violations, and other enforcement  
records. Records of maintenance inspections and maintenance activities  
shall be maintained. [For how long?]

(7) The program shall include an enforcement strategy to respond to issues  
of non-compliance.

vii. No later than the effective date of this permit, the Permittee must make  
available the "Notice of Intent for Construction Activity" and/or copies of the  
"Notice of Intent for Industrial Activity" to representatives of proposed new  
development and redevelopment. Permittees will continue to enforce local  
ordinances controlling runoff from sites that are also covered by stormwater  
permits that are issued by Ecology. Ecology is responsible for these sites  
and will continue to enforce NPDES permit requirements on Ecology  
permitted sites. Ecology will coordinate inspections and enforcement with  
the Permittees.

viii. No later than 18 months after the effective date of this permit, each  
Permittee shall ensure that all staff responsible for implementing the  
program to Control Stormwater Runoff from New Development,  
Redevelopment, and Construction Sites, including permitting, plan review,  
construction site inspections, and enforcement, are trained to conduct these  
activities. Follow-up training shall be provided as needed to address  
changes in procedures, techniques or staffing. Permittees shall document  
and maintain records of the training provided and the staff trained.

## 6. Structural Stormwater Controls

- a. The SWMP shall include a program to construct structural stormwater controls  
to address impacts to beneficial uses resulting from disturbances to watershed  
hydrology and stormwater pollutant discharges. This program shall consider  
impacts caused by stormwater discharges from areas of existing development,  
including runoff from highways, streets and roads owned or operated by the  
Permittee, and areas of new development, where impacts are anticipated as  
development proceeds. This program shall address impacts that are not  
adequately controlled by the other required actions of the SWMP, and shall  
provide proposed projects and an implementation schedule. It is understood that  
mitigating all existing development to current standards is not feasible and that

stormwater impacts will be prioritized and addressed as funding becomes available.

The program shall consider the construction of projects such as regional flow control facilities, water quality treatment facilities, and retrofitting of existing flood control facilities to provide water quality functions. Permittees should also consider other means to address impacts from existing development, such as reduction of hydrologic changes through the use of on-site (infiltration and dispersion) stormwater management BMPs and site design techniques, habitat acquisition or restoration of forest cover and riparian buffers, for compliance with this requirement. Permittees may not use in-stream culvert replacement projects for compliance with this requirement.

b. Minimum Performance Measures:

- i. No later than 18 months after the effective date of this permit, each Permittee shall develop and begin implementing a Structural Stormwater Control program designed to control stormwater impacts that are not adequately controlled by the other required actions of the SWMP. Permittees shall provide a list of planned individual projects that are scheduled for implementation during the term of this permit. [How will we know what will be built by developers? For example, strip malls have tenants with leases and the tenants change frequently.] Updates and revisions to the list will be provided in the annual report.

The Structural Stormwater Control program may also include a program designed to implement small scale projects that are not planned in advance.

- ii. Each Permittee shall include a description of the Structural Stormwater Control Program in the written documentation of their SWMP that must be submitted with the first year annual report. The description of the Structural Stormwater Control Program must include the following:
  - The goals that the Structural Stormwater Control Program are intended to achieve.
  - The planning process used to develop the Structural Stormwater Control Program, including: the geographic scale of the planning process, the issues and regulations addressed, the steps in the planning process, the types of characterization information considered, the amount budgeted for implementation, and the public involvement process.
- iii. For planned individual projects, or programs of projects, provide a description of the expected benefits including reductions in pollutant loading, flow reductions, habitat enhancement or other benefits.  
~~iii. provide the following information:~~
  - ~~• The estimated pollutant load reduction that will result from each project designed to provide stormwater treatment.~~
  - ~~• The expected outcome of each project designed to provide flow control.~~

- ~~• Any other expected environmental benefits.~~
- ~~• Planned monitoring or evaluation of the project and monitoring/evaluation results.~~

iv. Information about the Structural Stormwater Control Program shall be updated with each annual report.

## 7. Source Control Program for Existing Development

- a. The SWMP shall include a program to reduce pollutants in runoff from areas that discharge to municipal separate storm sewers owned or operated by the Permittee. The program shall include the following elements within the limits of state and federal law, and implemented by the minimum performance measures, below:
    - i. Requiring application of operational and structural source control BMPs, and, if necessary, treatment BMPs to pollution generating sources associated with existing land uses and activities at properties zoned for commercial, industrial and multifamily residential purposes per the descriptions provided in Appendix 8.
    - ii. Inspections of pollutant generating sources at commercial, industrial and multifamily properties to enforce implementation of required BMPs to control pollution discharging into municipal separate storm sewers owned or operated by the Permittee.
    - iii. Application and enforcement of local ordinances at applicable sites, including sites that are also covered by stormwater permits issued by Ecology. Ecology is responsible for these sites and will continue to enforce NPDES permit requirements on Ecology permitted sites. Ecology will coordinate inspections and enforcement with the Permittees. Permittees that are in compliance with the terms of this permit will not be held liable by Ecology for water quality standard violations caused by industries covered under an NPDES permit issued by Ecology.
    - ~~iv. Reduction of pollutants associated with the application of pesticides, herbicides, and fertilizer discharging into municipal separate storm sewers owned or operated by the Permittee.~~
- Pesticides, herbicides, and fungicides are all regulated by the Department of Agriculture (WDOA) or EPA (via labeling). We ensure that contractors and personnel are properly certified by WDOA, and that no involvement from Ecology is necessary for terrestrial applications. Municipal applications pale in comparison to private applications, and requirement for education via a number of partners is sufficient.]
- [Eliminate this section. All that is needed is a statement such as the following:]

No later than 12 months after the effective date of this permit, Permittees or their contractors shall apply terrestrial pesticides, herbicides and rodenticides in a manner consistent with labeling and FIFRA regulations, and applicators shall have all applicable licenses required by the Washington State Department of Agriculture. In the event of aquatic pesticide usage, additional permits will be obtained from the Department of Ecology or the Department of Agriculture, as appropriate.

1b. Minimum Performance Measures for Source Control Program:

- i. No later than 12 months after the effective date of this permit, adopt and begin enforcement of an ordinance, or other enforceable documents, requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities (See Appendix 3, to identify pollutant generating sources).

The local source control requirements must include operational and structural source control BMPs that, when used on a site specific basis, will protect water quality, reduce the discharge of pollutants to the maximum extent practicable, and satisfy the state requirement under chapter 90.48 RCW to apply all known, available, and reasonable methods of prevention, control and treatment (AKART) prior to discharge. Permittees must document how the stormwater source control BMP selection process for different activities and land uses, the types of BMPs and design criteria for those BMPs will protect water quality by reducing the discharge of pollutants to the maximum extent practicable, and satisfy the state AKART requirements.

Permittees who choose to use the source control BMPs in Volume IV of the 2005 Stormwater Management Manual for Western Washington, or an equivalent manual approved by Ecology, may cite this choice as their sole documentation to meet this requirement.

Ecology review and approval of the ordinance, or other enforceable documents, and source control BMPs is required. Each Permittee must submit the proposed source control program and all necessary documentation to Ecology for review, the deadline for doing so is no later than nine months after the effective date of this permit. If Ecology does not request changes within 30 days, the proposed source control ~~program is BMPs are~~ considered approved. Operational source control BMPs shall be required for all pollutant generating sources. Structural source control BMPs shall be required for pollutant generating sources if operational source control BMPs do not prevent illicit discharges or violations of surface water, ground water or sediment management standards. operational source control BMPs are determined not to be effective, resulting in an illicit discharge or causing or contributing to a violation of surface water, ground water, or sediment management standards because of inadequate stormwater controls. [This verbiage helps clarify the language. The definition of “determined not to

be effective” is not clear. Implementation of source control requirements may be done through education and technical assistance programs, provided that formal enforcement authority is available to the Permittee and is used as necessary.

- ii. No later than 12 months after the effective date of this permit, establish a program to identify sites which are potentially pollution generating. The program shall include:
  - (1) Estimating the inventory of land uses/businesses using the categories of land uses and businesses in Appendix 8. The Permittee shall update the inventory regularly.
  - (2) Complaint-based response to identify other pollutant generating sources, such as mobile or home-based businesses.

(3) The Permittee may also use a canvassing door-to-door approach to develop this inventory.

- iii. Starting no later than 24 months after the effective date of this permit, implement a self audit/inspection program for sites identified pursuant to S5.C.7.b.ii above, with adequate enforcement capability to ensure implementation of source control BMPs in accordance with the ordinance required in S5.C.7.b.i., above.
  - (1) All identified sites with a business address shall be provided, by mail, with information about activities that may generate pollutants and the source control requirements. Businesses may self-certify compliance with the source control requirements. The Permittee shall inspect 20% of these sites annually to assure BMP effectiveness and compliance with source control requirements. Follow-up inspections shall be included in this total.
  - (2) Each Permittee shall attempt to inspect 80% [as written we would be out of compliance if we miss a single site] of sites identified through legitimate complaints.
- iv. No later than 24 months after the effective date of this permit, each Permittee shall implement a progressive enforcement policy to require that facilities are brought into compliance with stormwater requirements within a reasonable time period as specified below:
  - (1) In the event that a Permittee determines, based on an inspection conducted above, that a site has failed to adequately implement all necessary BMPs, that Permittee shall take progressive enforcement including, as appropriate, phone calls, reminder letters or follow up inspections within 30 days from the date of the initial inspection, or other time period as specified in the corrective action letter.
  - (2) When a Permittee determines that a facility has failed to adequately implement BMPs after a follow-up inspection, that Permittee shall take

further enforcement action as established through authority in its municipal code and ordinances, or through the judicial system.

- (3) Each Permittee shall maintain records, including documentation of each site visit, inspection reports, warning letters, notices of violations, and other enforcement records, demonstrating a good faith effort to bring facilities into compliance. [How long do we need to keep these records?] Each Permittee shall also maintain records of sites that are not inspected because the property owner denies entry.

- (4) A Permittee may refer violations of local ordinances to Ecology provided that the Permittee also makes a good faith effort [Define extent of “consistent effort.”] of progressive enforcement. At a minimum a Permittee’s enforcement effort must include documentation of inspections and warning letters or notices of violation.

- v. No later than 24 months after the effective date of this permit, each Permittee shall ensure that all staff responsible for implementing the source control program are trained to conduct these activities. The training shall cover the legal authority for source control (adopted codes, ordinances, rules, etc.), source control BMPs and their proper application, inspection protocols, and enforcement procedures. Follow-up training shall be provided as needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained

#### 8. *Illicit Connections* and Illicit Discharges Detection and Elimination

- a. The SWMP shall include an ongoing program to detect, remove and prevent illicit connections and illicit discharges, including spills, into the municipal separate storm sewers owned or operated by the Permittee.
- b. Minimum Performance Measures:
  - i. No later than the effective date of this permit, each Permittee must continue implementing an on-going program to prevent, identify and respond to illicit connections and illicit discharges. The program shall include procedures for reporting and correcting or removing illicit connections, spills and other illicit discharges when they are suspected or identified. The program shall also include procedures for addressing pollutants entering the MS4 from an interconnected, adjoining MS4. Illicit connections and illicit discharges shall be identified through field screening, inspections, complaints/reports, construction inspections, maintenance inspections, source control inspections, and/or monitoring information, as appropriate.
  - ii. No later than 12 months after the effective date of this permit, each Permittee shall evaluate, and if necessary update, existing ordinances or other regulatory mechanisms to effectively prohibit non-stormwater, illegal discharges, and/or dumping into the Permittee’s municipal separate storm sewer system, to the maximum extent allowable under State and federal law.

(1) The regulatory mechanism required in S5.C.8.b.ii, above, does not need to prohibit the following categories of non-stormwater discharges, unless the discharges are identified as significant sources of pollutants to waters of the State:

- Diverted stream flows;
- Rising ground waters;
- Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20));
- Uncontaminated pumped ground water;
- Foundation drains;
- Air conditioning condensation;
- Irrigation water from agricultural sources that is commingled with urban stormwater;
- Springs;
- Water from crawl space pumps;
- Footing drains; and
- Flows from riparian habitats and wetlands.

(2) The regulatory mechanism required in S5.C.8.b.ii, above, shall prohibit the following categories of non-stormwater discharges unless the following conditions are met:

- Discharges from potable water sources, including water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be de-chlorinated to a concentration of 0.1 ppm or less, pH-adjusted if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments. **Please see Tacoma Waters separate comments on this section.**

~~Discharges from lawn watering and other landscape irrigation runoff. These discharges must be reduced through, at a minimum, public education activities (see S5.C.10) and water conservation efforts.~~ **Lawn watering and landscape irrigation flows should be deleted from the permit. If the concern is pollutants in these discharges, other permit sections address the concern. If Ecology's concern is simply flow, we maintain that there is no clear evidence that such discharges cause flow problems, as most of these flows occur in dry weather. In any event, it would be extremely burdensome for a Permittee to verify that such discharges had been reduced in volume. The City of Tacoma also has a very active Water Conservation Program operated through Tacoma Water. They focus on conservation and**

many of their programs address homeowners, lawn watering and irrigation.]

- Dechlorinated swimming pool discharges. The discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted if necessary, reoxygenated, and volumetrically and velocity controlled to prevent resuspension of sediments. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.
- Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents. The Permittee shall reduce these discharges through, at a minimum, public education activities (see S5.C.10) and/or water conservation efforts. To avoid washing pollutants into the MS4, Permittees must minimize the amount of street wash and dust control water used. [How do you control this? How do you do enforcement?] At active construction sites, street sweeping must be performed prior to washing the street.

- (3) At active construction The Permittee's SWMP shall, at a minimum, address each category in (2) above in accordance with the conditions stated therein.
- (4) The SWMP must further address any category of discharges in (1) or (2) above if the discharges are identified as significant sources of pollutants to waters of the State.
- (5) The regulatory mechanism required in S5.C.8.b.ii, above, shall include all appropriate enforcement provisions and procedures as allowed under State Law.

- iii. No later than 18 months after the effective date of this permit, each Permittee shall ensure that all municipal field staff who are responsible for identification, investigation, termination, cleanup, and reporting illicit discharges, including spills, improper disposal and illicit connections are trained to conduct these activities. Follow-up training shall be provided as needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained.
- iv. No later than 24 months after the effective date of this permit, develop and implement an ongoing training program for all municipal field staff, which as part of their normal job responsibilities might come into contact with or otherwise observe an illicit discharge or illicit connection to the storm sewer system shall be trained on the identification of an illicit discharge/connection and on the proper procedures for reporting and responding to the illicit discharge/connection. Follow-up training shall be provided as needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained.

v. Each Permittee shall continue to provide a publicly listed water quality citizen complaints/reports telephone number. This program shall be in place no later than the effective date of this permit. Complaints shall be responded to in accordance with S5.C.8.b.vii. and viii., below.

vi. Each Permittee shall have a program conduct on-going screening to detect illicit connections. ~~using the methods identified in Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection, October 2004.~~

**[Systematic screening for illicit connections is not used in Tacoma and is believed to not be as effective in identifying illicit connections as Tacoma's current program. Tacoma is successful in finding and removing illicit discharges through complaints, sanitary/storm business inspections, calls from maintenance crews, calls from solid waste crews, calls from volunteer sampling crews and public groups, identification during TVing storm lines and source tracing. Tacoma's existing illicit discharge detection program provides cost effectiveness and increased efficiencies (staff and public education and awareness) then a FTE to field screen every outfall in Tacoma.]**

~~(1) Each City covered under this permit shall complete an Outfall Reconnaissance Inventory for each stream and shoreline within the Permittee's incorporated area 180 days prior to expiration of the permit.~~

~~(2) Each County covered under this permit shall prioritize streams and shorelines in urban/higher density rural subbasins for screening and shall complete an Outfall Reconnaissance Inventory for at least half of streams and shorelines in these areas 180 days prior to expiration of this permit.~~

vii. Response to Illicit Connections

(1) Investigation: Upon discovery or upon receiving a report of a suspected illicit connection, Permittees shall initiate an investigation within 21 days, to determine the source of the connection, the nature and volume of discharge through the connection, and the responsible party for the connection.

(2) Termination: Upon confirmation of the illicit nature of a storm drain connection, Permittees shall use their enforcement authority and work with the property owner in a documented effort to eliminate the illicit connection within 6 months.

(3) A Permittee may refer illicit connection violations to Ecology provided that the Permittee also makes a good faith effort [Define extent of "consistent effort."] of progressive enforcement. At a minimum a Permittee's enforcement effort must include documentation of inspections and warning letters or notices of violation.

viii. No later than six months after the effective date of this permit, each Permittee shall develop and implement procedures to prevent, respond to

and clean up spills and improper disposal into municipal separate storm sewers owned or operated by the Permittee. Investigate, within seven days on average, any complaints/reports or monitoring information that indicates a potential illicit discharge, including a spill or illegal dumping. Immediately respond to problems/violations judged to be urgent, severe, or an emergency.

**[Ecology, not the Permittees is responsible for having the necessary resources to respond to large spills. Most Permittees don't have these resources and rely on Ecology for spill response. The spill response responsibility should not be transferred from Ecology to the Permittees via the permit.]**

The local municipality should have the capabilities to handle small oil spills in the right of way or in storm sewer systems and the related outfall location. Furthermore, these small spills would be generally less than 5 gals. Local response would follow established emergency plans following the Incident Command System under the local Fire Department with notification to state authorities.

**[Local public works agencies can not be expected to handle chemical spills or unknown products. Their role is long defined in city/count/state emergency plans as a support organization. Public safety is the number one driver to these events, including our own employees and cleanup is generally the responsibility of the spiller and/or funded and oversight provided by Ecology.]**

- ix. Each Permittee shall track and maintain records of the illicit discharge detection and elimination program, [How long should these records be kept?] including documentation of inspections, complaint/spill response and other enforcement records.

## 9. Operation and Maintenance Program

- a. The SWMP shall include a program to regulate maintenance activities and to conduct maintenance activities by the Permittee that prevent or reduce stormwater impacts. Within the limits of state and federal law the program shall include:

**[We also suggest that you recognize that Road Maintenance is being done via the Regional Roads Maintenance Plan worked by the Tri-County ESA partnership (with Ecology at the table) and approved by the National Oceanic and Atmospheric Administration (NOAA) Fisheries.]**

- i. Maintenance standards and programs for proper and timely maintenance of public and private stormwater facilities.
- ii. Practices for operating and maintaining Permittee's streets, roads, and highways to reduce stormwater impacts. For those entities adopting the

Regional Road Maintenance Practices, developed by the Tri-County ESA partnership and in cooperation with the Department of Ecology, and approved by NOAA Fisheries, implementation of those practices shall be deemed full compliance with the road maintenance practices portion of this permit.

- iii. Policies and procedures to reduce pollutants associated with the application of pesticides, herbicides, and fertilizer by the Permittee's agencies or departments: [Pesticides, herbicides, and fungicides are all regulated by the Department of Agriculture (WDOA) or EPA (via labeling). We ensure that contractors and personnel are properly certified by WDOA, and that no involvement from Ecology is necessary for terrestrial applications. Municipal applications pale in comparison to private applications, and requirement for education via a number of partners is sufficient.]

No later than 12 months after the effective date of this permit, Permittees or their contractors shall apply terrestrial pesticides, herbicides and rodenticides in a manner consistent with labeling and FIFRA regulations, and applicators shall have all applicable licenses required by the Washington State Department of Agriculture. In the event of aquatic pesticide usage, additional permits will be obtained from the Department of Ecology or the Department of Agriculture, as appropriate.

- iv. Practices for reducing stormwater impacts from *heavy equipment maintenance or storage yards*, and from *material storage facilities* owned or operated by the Permittee.

- v. A training component.

b. Minimum Performance Measures:

- i. Maintenance Standards. No later than 12 months after the effective date of this permit, each Permittee must establish maintenance standards that are as protective or more protective of facility function than those specified in Chapter 4 of Volume V of the 2005 Stormwater Management Manual for Western Washington.

~~The facility specific maintenance standards are intended to be conditions for determining if maintenance actions are required as identified through inspection. They are not intended to be measures of the facility's required condition at all times between inspections. Exceeding these conditions at any time between inspections and/or maintenance does not automatically constitute a violation of these standards. However, based upon inspection observations, the inspection and maintenance schedules shall be adjusted to minimize the length of time that a facility is in a condition that requires a maintenance action.~~ These standards are violated when an inspection identifies a required maintenance action related to facility function, and that action is not performed within 6 months for typical maintenance, within 9

months for revegetation, and within 2 years for maintenance that requires capital construction of less than \$25,000.

ii. Maintenance of private stormwater facilities regulated by the Permittee including facilities located at business and in private roads.

(1) Compliance with the inspection requirements of S5.C.9.b.ii.(2),(3), and (4), above, shall be determined by the presence of an established inspection program designed to inspect all known sites for which the Permittee can legally enter the property for inspection, and achieving inspection of 80% of all known sites. The list of sites will be updated as sites are added to the GIS mapping.

(2) No later than 1 year after the effective date of this permit, each Permittee shall evaluate and, if necessary, update existing ordinances or other enforceable documents requiring maintenance of ~~all~~ inventoried permanent stormwater treatment and flow control facilities regulated by the Permittee (including catch basins), in accordance with maintenance standards established under S5.C.9.b.i, above.

~~(3)~~ No later than 1 year after the effective date of this permit, each Permittee shall develop and implement an initial inspection schedule for ~~all~~ inventoried known, permanent stormwater treatment and flow control facilities (other than catch basins) [Does this include manholes?] regulated by the Permittee to inspect each facility at least once during the term of this permit to enforce compliance with adopted maintenance standards as needed based on the inspection.

~~(4)~~ No later than 4 years after the effective date of this permit, each Permittee shall develop an on-going inspection schedule for implementation after the initial schedule to ~~annually inspect all~~ inventoried stormwater treatment and flow control facilities (other than catch basins) [Does this include manholes?] regulated by the Permittee. The annual inspection schedule may be changed to a lesser or greater frequency of inspection, as appropriate to meet the maintenance standards, based on maintenance records of double the length of time of the proposed inspection frequency.

~~(5)~~ No later than two years after the effective date of this permit each Permittee shall manage maintenance activities to inspect ~~all~~ inventoried new permanent stormwater treatment and flow control facilities, including catch basins, in new residential developments every 6 months during the period of heaviest house construction (i.e., one to two years following subdivision approval) to identify maintenance needs and enforce compliance with maintenance standards as needed.

~~(6) Compliance with the inspection requirements of S5.C.9.b.ii.(2),(3), and (4), above, shall be determined by the presence of an established inspection program designed to inspect all sites, and achieving inspection of 95% of all sites.~~

(6) The Permittee shall require cleaning of catch basins regulated by the Permittee if they are found to be out of compliance with established maintenance standards in the course of inspections conducted at facilities under the requirements of S5.C.7 (Source Control Program), and S5.C.8 (Illicit Connections and Illicit Discharges Detection and Elimination), or if the catch basins are part of the treatment or flow control systems inspected under the requirements of S5.C.9.

iii. Maintenance of public stormwater facilities owned or operated by the Permittee

(1) Compliance with the inspection requirements of S5.C.9.b.iii.(2) and (3), above, shall be determined by the presence of an established inspection program designed to inspect all known sites, and achieving inspection of 90% of all known sites.

(1)(2) No later than 24 months after the effective date of this permit each Permittee shall begin implementing a program to inspect all permanent stormwater treatment and flow control facilities (other than catch basins) [Does this include manholes?] owned or operated by the Permittee annually, and implement appropriate maintenance action in accordance with adopted maintenance standards. The annual inspection schedule may be changed to a lesser or greater frequency of inspection as appropriate to meet the maintenance standards based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records for permanent stormwater treatment and flow control facilities, the Permittee may substitute written statements, including the signature certification in General Condition G19, proposing a specific less frequent inspection schedule, based on actual inspection and maintenance experience.

(2)(3) No later than 24 months after the effective date of this program each Permittee shall begin implementing a program to conduct spot checks of potentially damaged permanent treatment and flow control facilities (other than catch basins) after major storm events (24 hour storm event with a 2540 year recurrence interval). If spot checks indicate widespread damage/maintenance needs, inspect all known stormwater treatment and flow control facilities that may be affected. Conduct repairs or take appropriate maintenance action in accordance with maintenance standards established under S5.C.9.b.i, above, based on the results of the inspections.

(3) Compliance with the inspection requirements of S5.C.9.b.iii.(1) and (2), above, shall be determined by the presence of an established inspection program designed to inspect all sites, and achieving inspection of 95% of all sites.

iv. Maintenance of Catch Basins Owned or Operated by the Permittee

(1) No later than 24 months after the effective date of this permit each Permittee shall begin implementing a program to annually inspect catch basins and inlets owned or operated by the Permittee.

- Inspections may be conducted on a “circuit basis” whereby a sampling of catch basins and inlets within each circuit is inspected to identify maintenance needs. Include in the sampling an inspection of the catch basin immediately upstream of any system outfall. Clean all known catch basins within a given circuit at one time if the inspection sampling indicates cleaning is needed to comply with maintenance standards established under S5.C.9.b.i, above.
- As an alternative to inspecting catch basins on a “circuit basis,” the Permittee may inspect all catch basins, and clean only catch basins where cleaning is needed to comply with maintenance standards.

(2) The annual inspection schedule for may be changed to a lesser or greater frequency of inspection as appropriate to meet the maintenance standards based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records for catch basins, the Permittee may substitute written statements, including the signature certification in General Condition G19, proposing a specific less frequent inspection schedule, not to exceed three years, based on actual inspection and maintenance experience.

(3) The disposal of decant water shall be in accordance with the requirements in Appendix 6.

- v. Records of inspections and maintenance or repair activities conducted by the Permittee shall be maintained. Records of maintenance or repair requiring capital construction of \$25,000 or more shall be maintained and provided in the annual report.
- vi. Establish practices to reduce stormwater impacts associated with runoff from parking lots, streets, roads, and highways owned or operated by the Permittee; and road maintenance activities conducted by the Permittee, within 12 months of the effective date of this permit.

For those entities adopting the Regional Road Maintenance Practices, developed by the Tri-County ESA partnership and in cooperation with the Department of Ecology, and approved by NOAA Fisheries, implementation of those practices shall be deemed full compliance with the road maintenance practices portion of this permit

Implementation of practices shall begin no later than 18 months after the effective date of this permit, and continue on an ongoing basis throughout the term of the permit. The following activities must be addressed:

- (1) Pipe cleaning
- (2) Cleaning of culverts that convey stormwater in ditch systems

- (3) Ditch maintenance
  - (4) Street cleaning
  - (5) Road repair and resurfacing, including pavement grinding
  - (6) Snow and ice control
  - (7) Utility installation
  - (8) Maintaining roadside areas, including vegetation management.
  - (9) Dust control
  - (10) Pavement striping maintenance
- vii. No later than 12 months after the effective date of this permit each Permittee shall establish and implement policies and procedures to reduce pollutants in discharges from lands owned or maintained by the Permittee subject to this permit, including but not limited to: parks, open space, road right-of-ways, maintenance yards, and at stormwater treatment and flow control facilities. These policies and procedures must address, but are not limited to:

**[Most of these items are in the Manual in the Source Control and BMP sections. Why is it being made a separate requirement here? Delete this section entirely, and say will follow Manual.]**

~~(1) Application of fertilizer, pesticides, and herbicides, including the development of Nutrient management and Integrated Pest Management Plans~~

**[Pesticides, herbicides, and fungicides are all regulated by the Department of Agriculture (WDOA) or EPA (via labeling). We ensure that contractors and personnel are properly certified by WDOA, and that no involvement from Ecology is necessary for terrestrial applications. Municipal applications pale in comparison to private applications, and requirement for education via a number of partners is sufficient.]**

**[Eliminate (1) above and replace with something such as the following:]**

No later than 12 months after the effective date of this permit, Permittees or their contractors shall apply terrestrial pesticides, herbicides and rodenticides in a manner consistent with labeling and FIFRA regulations, and applicators shall have all applicable licenses required by the Washington State Department of Agriculture. In the event of aquatic pesticide usage, additional permits will be obtained from the Department of Ecology or the Department of Agriculture, as appropriate.

~~(2)~~(1) Sediment and erosion control

~~(3)~~(2) Landscape maintenance and vegetation disposal

~~(4)~~(3) Trash management

~~(5)(4)~~ Building exterior cleaning and maintenance

viii. No later than 2 years after the effective date of this permit, develop and implement an ongoing training program for appropriate employees of the Permittee whose construction, operations or maintenance job functions may impact stormwater quality. The training program shall address the importance of protecting water quality, the requirements of this permit, operation and maintenance standards, inspection procedures, selecting appropriate BMPs, ways to perform their job activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns, including potential illicit discharges. Follow-up training shall be provided as needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained. [An accepted Endangered Species Act (ESA) training program should be acceptable to meet these requirements. Credit should be given for training activities that take place in the year or two prior to the implementation of the permit.]

ix. Develop and implement a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the Permittee in areas subject to this permit, that are not covered under the Industrial Stormwater General permit. The SWPPPs must be developed within 18 months of the effective date of this permit. Implementation of non-structural BMPs shall begin immediately after the pollution prevention plan is developed. A schedule for implementation of structural BMPs shall be included in the SWPPP. Generic SWPPPs that can be applied at multiple sites may be used to comply with this requirement. The SWPPP shall include periodic visual observation of discharges from the facility to evaluate the effectiveness of BMPs.

[Tacoma Water is concerned the permit is trying to address heavy equipment maintenance or storage yards, and material storage facilities that are not covered under an industrial permit as if it was covered under an industrial permit. As Appendix 3 demonstrates, there are numerous sites both private and public that require Source Control BMPs.]

This particular requirement appears to have little value, as most of the documentation is required under the SWPPP. Development and implementation of Operation and Maintenance manuals, Spill Control Plans and employee education regarding our surface water facilities are a much better use of our time.

Tacoma has no problem with providing SWPPPs when we submit for permits for these sites at the time of redevelopment. We also don't

object to working with Source Control inspectors to determine areas to improve our business practices.

However, Tacoma Water strongly objects to the statement “A schedule for implementation of structural BMPs shall be included in the SWPPP.” There is no nexus to require implementation of structural BMPs for sites that are not under a development permit action or some sort of compliance action. Tacoma Water’s schedule for implementation of structural BMPs will coincide with any future development plans regarding our heavy equipment maintenance or storage yards, and material storage facilities.

The requirements of this section are vague and appear arbitrary. Terms like “periodic” and “visual observation of discharges ... to evaluate the effectiveness of BMPs” are difficult to define, especially considering the potential cost of capital improvements that might result from misapplication of these “standards”. A well written SWMP for all facilities will be much more effective, apply to heavy equipment and material storage yards, as well as all other potentially polluting sources, without arbitrarily and ineffectively increasing costs for compliance. This section should be omitted from the final permit.]

#### 10. Education and Outreach Program

- a. The SWMP shall include an education and outreach program aimed at residents, businesses, industries, elected officials, policy makers, planning staff and other employees of the Permittee. The goal of the education program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. An education and outreach -program may be developed locally or should be developed regionally. Minimum Performance Measures:
  - i. No later than 12 months after the effective date of this permit each Permittee shall implement or participate in an education and outreach program that uses a variety of methods to target the audiences and topics listed in II, below. The outreach program shall be designed to achieve adoption of behavior measurable improvements in each target audience’s understanding of the problem and what they can do to solve it, and measurable improvements in the percentage of each target audience regularly carrying out the intended action or behavior change. [Tacoma believes that the Public Opinion Polling and Market Research needed to quantify the Education and Outreach Program as specified will be extremely expensive and won’t produce much helpful information.]
  - ii. The education and outreach program shall target increase regular adoption of the following behaviors activities in the following target audiences by the expiration date of this permit:

- (1) Awareness among the general public of the importance of improving water quality, reducing impervious surfaces, ~~and protecting the existing and designated uses of waters of the state and~~ and the potential impacts caused by stormwater discharges, ~~and promote specific actions and opportunities for avoiding, minimizing, reducing and/or eliminating the adverse impacts of stormwater runoff, especially through the use of source control BMPs.~~
- (2) Awareness of natural yard care techniques (e.g. composting lawn and yard clippings, using compost and mulch, using natural organic fertilizers, watering infrequently and deeply) among homeowners, the general public, landscape professionals, and property managers to protect water quality.
- ~~(3) Awareness by homeowners, the general public, landscape professionals, and property managers of the need to protect water quality by reducing their purchase of and properly storing, using and disposing of pesticides, fertilizers, and other yard care chemicals. [This is not the responsibility of Phase I municipalities because pesticides, fertilizers and other yard care chemicals are regulated through the state and federal governments. The Washington State Department of Agriculture regulates the use of pesticides and fertilizers in Washington and licenses commercial pest control operators. The United States Environmental Protection Agency approves these chemicals for use.]~~
- (3) Awareness by the general public and businesses of the need to protect water quality by ~~reducing their purchase of and~~ properly storing, using, and disposing of automotive chemicals, hazardous cleaning supplies, and other hazardous materials, ~~and by facilitating use of source control BMPs that minimize the discharge of soap/detergents (e.g., supplying or providing grant funding for carwash kits, etc.). [This is not the responsibility of Phase I municipalities because pesticides, fertilizers and other yard care chemicals are regulated through the state and federal governments. The Washington State Department of Agriculture regulates the use of pesticides and fertilizers in Washington and licenses commercial pest control operators. The United States Environmental Protection Agency approves these chemicals for use.]~~
- ~~(6)(3) Use of technical standards to develop stormwater site plans and erosion control plans, and the use of Best Management Practices to mitigate contaminated runoff and the quantity of runoff from development sites by engineers, construction contractors, developers, development review staff, and land use planners. [This is repetitive. It is already included in the new development and redevelopment requirements.]~~

(4) ~~Understanding and u~~Use of Low Impact Development (LID) techniques (e.g. appropriate site design, pervious paving, full dispersion BMPs, and retention of forests and mature trees). ~~among engineers, contractors, developers, architects, landscape architects, realtors, and potential home buyers to avoid or minimize stormwater impacts of new development.~~

~~(7)(5)~~ Awareness by small businesses and the general public about the impacts of illicit discharges. ~~and encourage their identification and removal to avoid impacts to water quality.~~

~~(6)(6)~~ Involvement the general public in environmental stewardship activities (e.g. habitat restoration and community involvement and education projects). ~~to increase awareness of the importance of water quality and mitigate, reduce, or eliminate adverse impacts of stormwater runoff.~~

~~iii. Each permittee shall implement or participate in an effort to measure understanding and adoption of the targeted behaviors among the targeted audiences. The resulting measurements shall be used to direct education and outreach resources most effectively as well as to evaluate changes in adoption of the targeted behaviors.~~

~~iv.iii.~~ Each Permittee shall track and maintain records of public education activities.

## **S6. STORMWATER MANAGEMENT PROGRAM FOR CO-PERMITTEES AND SECONDARY PERMITTEES**

A. This section applies to all Secondary Permittees, whether coverage under this Permit is obtained individually or as a Co-Permittee with a City and/or Town and/or County and/or another Secondary Permittee.

Each Co-Permittee and Secondary Permittee shall develop and implement a stormwater management program (SWMP) during the term of this permit. The SWMP shall be designed to reduce the discharge of pollutants from regulated small MS4s to the maximum extent practicable and protect water quality. For the purpose of this permit a SWMP for a Co-Permittee or Secondary Permittee is a set of actions and activities comprising the components in this Special Condition as outlined below. All applicable components are mandatory and must be implemented by each Co-Permittee or Secondary Permittee within the limits of state and federal law. The SWMP must be developed and implemented in accordance with the schedules contained in this section and shall be fully developed and implemented 180 days before the expiration date of this Permit. Notwithstanding the schedules contained in this section for implementation of SWMP components, Secondary Permittees that are already implementing some or all of the SWMP components in this section shall continue implementation of those components of their SWMP.

Each Co-Permittee and Secondary Permittee shall track the cost of development and implementation of the SWMP required by this section. This information shall be included in the annual report.

1. S6.B Coordination, and S8.C Legal Authority are applicable to all Co-Permittees and Secondary Permittees covered under this permit.
2. S6.D is applicable only to the Port of Seattle and the Port of Tacoma.
3. S6.E is applicable only to King County as a Co-Permittee with the City of Seattle for MS4s owned by King County but located within the City of Seattle.
4. S6.F is applicable all other Secondary Permittees.

#### B. Coordination

The SWMP shall include mechanisms to encourage coordinated stormwater-related policies, programs and projects within a watershed and interconnected MS4s. Where relevant and appropriate, the SWMP shall also include coordination among departments of the Secondary Permittee to ensure compliance with the terms of this Permit.

#### C. Legal Authority

To the extent allowable under state law and federal law, each Secondary Permittee must be able to demonstrate that they can operate pursuant to legal authority which authorizes or enables the Secondary Permittee to control discharges to and from municipal separate storm sewers owned or operated by the Secondary Permittee.

This legal authority, which may be a combination of statutes, ordinances, permits, contracts, orders, interagency agreements, or similar means, shall include the ability to:

1. Control the contribution of pollutants to municipal separate storm sewers owned or operated by the Secondary Permittee from stormwater discharges associated with industrial activity, and control the quality of stormwater discharged from sites of industrial activity into the Secondary Permittee's municipal separate storm sewer;
2. Prohibit illicit discharges to the municipal separate storm sewer owned or operated by the Secondary Permittee;
3. Control the discharge of spills and the dumping or disposal of materials other than stormwater into the municipal separate storm sewer owned or operated by the Secondary Permittee;
4. Control through interagency agreements among co-applicants, the contribution of pollutants from one portion of the MS4 to another portion of the MS4;

5. Require compliance with conditions in ordinances, permits, contracts, or orders; and,

6. Within the limitations of state law, carry out inspection, surveillance, and monitoring procedures necessary to determine compliance and non-compliance with permit conditions, including the prohibition on illicit discharges to the MS4.

D. Stormwater Management Program for the Port of Seattle and Port of Tacoma:

1. Mapping and Documentation. The SWMP shall include an ongoing program for gathering, maintaining, and using adequate information to conduct planning, priority setting, and program evaluation activities for Port-owned properties.

Minimum Performance Measures. The following information will be gathered and retained:

a. Mapping of known municipal separate storm sewer outfalls, and maps depicting land use for property owned by the Port district, and all other properties served by municipal separate storm sewers known to and owned or operated by the Port. The mapping shall be completed within 2 years of receiving coverage under this permit.

b. Mapping of tributary conveyances, and the associated drainage areas of municipal separate storm sewer outfalls owned or operated by the Port, with a 24 inch nominal diameter or larger, or an equivalent cross-sectional area for nonpipe systems. The mapping will be completed within 2 years of receiving coverage under this permit.

c. To the extent consistent with national security laws and directives, each Port shall make available to Ecology, upon request, GIS data layers generated by the Port depicting outfall locations, land use, tributary conveyances and associated drainage areas of outfalls owned or operated by the Port district. The preferred format of submission will be an electronic format with fully described mapping standards. An example description is provided at <http://www.ecy.wa.gov/services/gis/data/standards.htm> where the preferred standards are described. Notification of updated GIS data layers shall be included in annual reports.

d. No later than 2 years after receiving coverage under this permit, develop and implement a program to maintain operation and maintenance records for stormwater facilities covered under this permit. The information shall be available for inspection.

e. Upon request, and to the extent consistent with national security laws and directives, mapping information and operation and maintenance records shall be provided to the City or County in which the Port is located.

2. Source Control in existing Developed Areas. The SWMP shall include a program to reduce pollutants in runoff from areas that discharge to municipal separate storm sewers owned or operated by the Port district, through the development and

implementation of Stormwater Pollution Prevention Plans (SWPPPs). The SWPPP is a documented plan to implement measures to identify, prevent, and control the contamination of discharges of stormwater to surface or ground water. SWPPPs shall be prepared and implemented for all Port-owned lands with potential pollutant-generating sources (see Appendix 3, for definition of pollutant-generating sources) that are not covered under the Industrial Stormwater General Permit, the Boatyard General Permit or an individual NPDES permit that covers stormwater discharges, and that could contribute pollutants to municipal separate storm sewers owned or operated by the Port.

#### Minimum Performance Measures

- a. SWPPPs must be developed for applicable properties within 24 months of receiving coverage under this permit.
- b. The SWPPP shall include a facility assessment including a site plan, identification of pollutant sources and description of the drainage system.
- c. The SWPPP shall include a description of the BMPs determined to be appropriate under the 2005 Stormwater Management Manual for Western Washington (or its approved equivalent) to eliminate or reduce stormwater contamination. Implementation of non-structural BMPs shall begin immediately after the pollution prevention plan is developed. A schedule for implementation of structural BMPs shall be included in the SWPPP. Generic SWPPPs that can be applied at multiple sites may be used to comply with this requirement.
- d. The Port shall maintain a list of sites for which SWPPPs are required under this permit. At least 15% of the listed sites shall be inspected annually, and 80% of the total number of listed properties will be inspected by 180 days before the expiration date of the permit.
- e. The SWPPPs shall include policies and procedures to reduce pollutants associated with the application of pesticides, herbicides and fertilizer.
- f. The SWPPPs shall include measures to prevent, identify and respond to illicit discharges, including illicit connections, spills and improper disposal. Immediately upon becoming aware of a spill into the drainage system owned or operated by the Port, the Port shall notify the City or County it is located in, and notify Ecology.
- g. The SWPPPs shall include a component related to inspection and maintenance of stormwater facilities and catch basins that is consistent with the Port's Operation and Maintenance Program, as specified in S6.D.3, below.

3. Operation and Maintenance Program. The SWMP shall include an operation and maintenance program for all stormwater treatment and flow control facilities, and catch basins to ensure that BMPs continue to function properly.

#### Minimum Performance Measures:

- a. Each Port must prepare an operation and maintenance manual for all stormwater BMPs that are under the functional control of the Port District that discharge to its MS3s. The deadline for preparing the O&M manual is 2 years after receiving coverage under this permit. A copy of the manual shall be retained in the appropriate Port department. The operation and maintenance manual shall establish facility-specific maintenance standards that are as protective, or more protective than those specified in Chapter 4 of Volume V of the 2005 Stormwater Management Manual for Western Washington.

The facility-specific maintenance standards are intended to be conditions for determining if maintenance actions are required as identified through inspection. They are not a measure of the facilities required condition at all times between inspections. Exceeding the maintenance standards between inspections and/or maintenance does not automatically constitute a violation of these standards. However, based upon inspection observations, the inspection and maintenance schedules shall be adjusted to minimize the length of time that a facility is in a condition that requires a maintenance action. These standards are violated when an inspection identifies a required maintenance action related to facility function, and that action is not performed within 6 months for typical maintenance, within 9 months for re-vegetation, and within 2 years for maintenance that requires capital construction of less than \$25,000.

- b. The Port will manage maintenance activities to inspect all stormwater BMPs listed in the O&M manual annually, and take appropriate maintenance action in accordance with the O&M manual. The Port may change the annual inspection to a lesser or greater frequency of inspection, as appropriate to comply with maintenance standards, based on maintenance records of double the length of time of the proposed inspection frequency.

- c. The Port shall provide appropriate training for Port maintenance staff.

- d. The Port will maintain records of inspections and maintenance activities.

4. Education Program. The SWMP shall include an education program aimed at tenants and Port employees. The goal of the education program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.

#### Minimum Performance Measure:

- a. No later than 18 months after receiving coverage under this permit, the Port shall make educational materials available to tenants and Port employees whose job duties could negatively impact stormwater.
5. Monitoring Program. The monitoring requirements for the Port of Seattle and Port of Tacoma are included in Special Condition S8.
6. Construction Site Stormwater Runoff Control

The SWMP shall include a program to reduce pollutants in stormwater runoff to the MS3s owned or operated by the Port District from the Port District's construction activities that meet the thresholds in Appendix 1 of this permit.

Minimum performance measures:

- a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Port is located that govern construction phase stormwater pollution prevention measures.
- b. Seek coverage under the General NPDES Permit for Stormwater Discharges Associated with Construction Activities, when applicable.
- c. Provide training or coordinate with existing training efforts to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.

7. Post-Construction Stormwater Management for New Development and Redevelopment

The SWMP shall include a program to address post-construction stormwater runoff to the MS3s owned or operated by the Port District from the Port District's new development and redevelopment projects that meet the thresholds in Appendix 1 of this permit. The program must establish controls to prevent or minimize water quality impacts.

Minimum performance measures:

- a. Comply with all relevant ordinances, rules and regulations of the local jurisdiction(s) in which the Port District's MS3 is located that govern post-construction stormwater pollution prevention measures, including proper operation and maintenance of the MS3.
- b. Provide for the post-construction stormwater controls in Appendix 1 to be included on all land-disturbing projects which exceed regulatory thresholds.

E. Stormwater Management Program for King County as a Co-Permittee

King County as a Co-Permittee with the City of Seattle for the Densmore Metro Drainage Basin, as defined in the Memorandum of Agreement between the City and King County dated September 25, 1995, shall participate in the City of Seattle's Stormwater Management Program in accordance with the Joint Stormwater Management Program element of the Memorandum of Agreement. The Joint Stormwater Management Program shall at a minimum include the following:

1. Stormwater controls for areas of existing development consistent with S5.C.6.
2. A source control program consistent with S5.C.7.
3. An illicit discharge detection and elimination program consistent with S5.C.8.
4. An operation and maintenance program consistent with S5.C.9.

5. A public education program consistent with S5.C.10.

F. Stormwater Management Program for all other Secondary Permittees

All other Secondary Permittees shall develop and implement the following Stormwater Management Program. The term “all other Secondary Permittees” means drainage, diking, flood control, or diking and drainage districts, Ports (other than the Ports of Seattle and Tacoma), public colleges and universities, and any other owners or operators of municipal separate storm sewers located within the municipalities that are listed as Permittees in Special Condition S1.B.

SWMP components

1. Public Education and Outreach

Each Secondary Permittee shall implement the following stormwater education strategies:

- a. Storm drain inlets owned and operated by the Secondary Permittee that are located in maintenance yards, in parking lots, along sidewalks, and at pedestrian access points shall be clearly and permanently labeled with the message “Dump no waste” and indicating the point of discharge as a river, lake, bay, or groundwater. No later than three years from the date of permit coverage, at least 50 percent of these inlets must be labeled; and no later than the expiration date of this Permit, all of these inlets shall be labeled. As identified during visual inspection and regular maintenance of storm drain inlets per the requirements of S6.F.3.iv and S6.F.6.a.i below, or as otherwise reported to the Secondary Permittee, any inlet having a label that is no longer clearly visible and/or easily readable must be re-labeled within 90 days.
- b. Each year beginning no later than three years from the date of permit coverage, Public Ports, Colleges and Universities shall distribute educational information to tenants and residents on the impact of stormwater discharges on receiving waters, and steps that can be taken to reduce pollutants in stormwater runoff. Different combinations of topics shall be addressed each year, and, before the expiration date of this Permit, tenants and residents shall receive educational information about the following topics, where relevant:
  - i. How stormwater runoff affects local waterbodies;
  - ii. Proper use and application of pesticides and fertilizers;
  - iii. Benefits of using well-adapted vegetation;
  - iv. Alternative equipment washing practices including cars and trucks that minimize pollutants in stormwater;
  - v. Benefits of proper vehicle maintenance and alternative transportation choices; proper handling and disposal of wastes, including the location of hazardous waste collection facilities in the area;
  - vi. Hazards associated with illicit connections; and

vii. Benefits of litter control and proper disposal of pet waste.

Compliance with this requirement can be achieved through participation in the local jurisdiction's public education and outreach programs.

## 2. Public Involvement and Participation

180 days before the expiration date of this Permit, each Secondary Permittee shall:

- a. Publish a public notice in the local newspaper and solicit public review of their SWMP.
- b. Make the latest updated version of the SWMP available to the public. If the Secondary Permittee maintains a website, the SWMP shall be posted on the Secondary Permittee's website.

## 3. Illicit Discharge Detection and Elimination

Each Secondary Permittee shall:

- a. From the date of permit coverage, comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern non-stormwater discharges.
- b. Develop and adopt appropriate policies prohibiting illicit discharges and illegal dumping no later than one year from the date of permit coverage. Identify possible enforcement mechanisms no later than one year from the date of permit coverage; and, no later than eighteen months from the date of permit coverage, develop and implement an enforcement plan using these mechanisms to ensure compliance with illicit discharge policies. These policies shall address, at a minimum: illicit connections; non-stormwater discharges as defined below; and spilling, dumping, or otherwise improperly disposing of: hazardous materials, pet waste, and litter.
  - i. Non-stormwater discharges covered by another NPDES permit and discharges from emergency fire fighting activities are allowed in the MS4 in accordance with S2 Authorized Discharges.
  - ii. The policies do not need to prohibit the following categories of non-stormwater discharges:
    - Diverted stream flows;
    - Rising ground waters;
    - Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20));
    - Uncontaminated pumped ground water;
    - Foundation drains;
    - Air conditioning condensation;
    - Irrigation water from agricultural sources that is commingled with urban stormwater;

- Springs;
  - Water from crawl space pumps;
  - Footing drains; and
  - Flows from riparian habitats and wetlands.
- iii. The policies shall prohibit the following categories of non-stormwater discharges unless the stated conditions are met:
- Discharges from potable water sources, including water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be de-chlorinated to a concentration of 0.1 ppm or less, pH-adjusted if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments;
  - Discharges from lawn watering and other landscape irrigation runoff. These discharges must be reduced through, at a minimum, public education activities and water conservation efforts conducted by the Secondary Permittee and/or the local jurisdiction.
  - Dechlorinated swimming pool discharges. The discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted if necessary, reoxygenated, and volumetrically and velocity controlled to prevent resuspension of sediments. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.
  - Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents. The Secondary Permittee shall reduce these discharges through, at a minimum, public education activities and/or water conservation efforts conducted by the Secondary Permittee and/or the local jurisdiction. To avoid washing pollutants into the MS4, the Secondary Permittee shall minimize the amount of street wash and dust control water used. At active construction sites, street sweeping must be performed prior to washing the street.
- iv. The Secondary Permittee's SWMP shall, at a minimum, address each category in iii above in accordance with the conditions stated therein.
- v. The SWMP must further address any category of discharges in ii or iii above if the discharge is identified as a significant source of pollutants to waters of the State.
- c. 180 days before the expiration date of this Permit, develop a storm sewer system map showing the locations of all known storm drain outfalls, labeling the receiving waters, and delineating the areas contributing runoff to each outfall. Make the map (or completed portions of the map) available on request to the Department and/or to other Permittees or Secondary Permittees. The preferred, but not required, format of submission will be an electronic format

with fully described mapping standards. An example description is provided at <http://www.ecy.wa.gov/services/gis/data/standards.htm>.

- d. Conduct field inspections and visually inspect for illicit discharges at all known outfalls that discharge to surface waters. Visually inspect at least one third (on average) of all known outfalls each year beginning no later than two years from the date of permit coverage. Develop and implement procedures to identify and remove any illicit discharges. Keep records of inspections and follow-up activities.
- e. 180 days before the expiration date of this Permit, develop and implement a spill response plan that includes coordination with a qualified spill responder.
- f. Provide staff training or coordinate with existing training efforts to educate relevant staff on proper best management practices for preventing spills and illicit discharges. All relevant staff must be trained.

#### 4. Construction Site Stormwater Runoff Control

From the date of permit coverage, each Secondary Permittee shall:

- a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern construction phase stormwater pollution prevention measures.
- b. For all construction projects under the control of the Secondary Permittee which require an NPDES permits under 40 CFR 122.26 and where required by departments General NPDES Permit for Stormwater Discharges Associated with Construction Activities the Secondary Permittees shall obtain coverage under the General NPDES Permit for Stormwater Discharges Associated with Construction Activities or an alternative individual NPDES permit prior to discharging.
- c. To the extent allowable under local, state and federal law, coordinate with the local jurisdiction regarding projects owned and operated by other entities which discharge into the Secondary Permittee's MS4, to assist the local jurisdiction with achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s), including implementation of the Minimum Technical Requirements for Construction Stormwater Pollution Prevention contained in Appendix 1, Minimum Requirement #2.
- d. Provide training or coordinate with existing training efforts to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.
- e. Coordinate as requested with the Department or the local jurisdiction to provide access for inspection of construction sites or other land disturbances that are under the control of the Secondary Permittee during the active grading and/or construction period.

#### 5. Post-Construction Stormwater Management for New Development and Redevelopment

From the date of permit coverage, each Secondary Permittee shall:

- a. Comply with all relevant ordinances, rules and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern post-construction stormwater pollution prevention measures.
- b. To the extent allowable under local, state and federal law, coordinate with the local jurisdiction regarding projects owned and operated by other entities which discharge into the Secondary Permittee's MS4, to assist the local jurisdiction with achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s), including implementation of the Minimum Technical Requirements in Appendix 1.
- c. No later than one year from the date of permit coverage, and to the extent allowable under local, state and federal law, new projects owned or operated by the Secondary Permittee, must comply with the Minimum Technical Requirements in Appendix 1 for post construction stormwater controls.

6. Pollution Prevention and Good Housekeeping for Municipal Operations

Each Secondary Permittee shall:

- a. No later than three years from the date of permit coverage, develop and implement a municipal operation and maintenance (O&M) plan to minimize stormwater pollution from activities conducted by the Secondary Permittee. The O&M Plan must include appropriate pollution prevention and good housekeeping procedures for all of the following operations, activities, and/or types of facilities that are present within the Secondary Permittee's boundaries. Record keeping is required to track performance of operational source control activities; performance of scheduled inspections and maintenance activities; and response to spills and other potential pollution incidents not addressed in S6.F.3
  - i. Stormwater collection and conveyance system, including catch basins, stormwater sewer pipes, open channels, culverts, structural stormwater controls, and structural runoff treatment and/or flow control facilities. The O&M Plan must address, but is not limited to: scheduled inspections and maintenance activities, including cleaning and proper disposal of waste removed from the system. Secondary Permittees shall properly maintain stormwater collection and conveyance systems owned or operated by the Secondary Permittee and regularly inspect and maintain all structural post-construction stormwater BMPs to ensure facility function. The Secondary Permittee shall establish maintenance standards that are as protective or more protective of facility function as those specified in Chapter 4 Volume V of the 2005 Stormwater Management Manual for Western Washington.
 

Secondary Permittees shall conduct spot checks of stormwater treatment and flow control facilities following a 24 hour storm event with a 10-year or greater recurrence interval.
  - ii. Roads, highways, and parking lots. The O&M Plan must address, but is not limited to: deicing, anti-icing, and snow removal practices; snow disposal

1 areas; material (e.g. salt, sand, or other chemical) storage areas; all-season  
 2 BMPs to reduce road and parking lot debris and other pollutants from  
 3 entering the MS4. Secondary Permittees shall store all de-icing and anti-  
 4 icing materials in a permanent walled and roof structure.

5 iii. Vehicle fleets. The O&M Plan must address, but is not limited to: storage,  
 6 washing, and maintenance of municipal vehicle fleets; and fueling facilities.  
 7 Secondary Permittees shall conduct all vehicle and equipment washing and  
 8 maintenance in a self-contained covered building or in designated wash  
 9 and/or maintenance areas.

10 iv. External building maintenance. The O&M Plan must address, building  
 11 exterior cleaning and maintenance including cleaning, washing, painting and  
 12 other maintenance activities.

13 v. Parks and open space. The O&M Plan must address, but is not limited to:  
 14 proper application of fertilizer, pesticides, and herbicides; sediment and  
 15 erosion control; BMPs for landscape maintenance and vegetation disposal;  
 16 and trash management.

17 vi. Material storage areas, heavy equipment storage areas, and maintenance  
 18 areas. Secondary Permittees shall develop and implement a Stormwater  
 19 Pollution Prevention Plan to protect water quality at each of these facilities  
 20 owned or operated by the Secondary Permittee and not covered under the  
 21 General NPDES Permit for Stormwater Discharges Associated with  
 22 Industrial Activities or under another NPDES permit that covers stormwater  
 23 discharges associated with the activity.

24 vii. Other facilities that would reasonably be expected to discharge  
 25 contaminated runoff. The O&M Plan must address proper stormwater  
 26 pollution prevention practices for each facility.

27 viii. The O&M Plan shall include sufficient documentation and records as  
 28 necessary to demonstrate compliance with the O&M Plan requirements in  
 29 S6.F.6.a.i through vii above.

30 b. From the date of coverage under this Permit, also have permit coverage for all  
 31 facilities owned, operated or maintained by the Secondary Permittee that are  
 32 required to be covered under the General NPDES Permit for Stormwater  
 33 Discharges Associated with Industrial Activities.

34 c. Train all employees whose construction, operations, or maintenance job  
 35 functions may impact stormwater quality. The training shall address:

- 36 i. The importance of protecting water quality,
- 37 ii. The requirements of this Permit,
- 38 iii. Operation and maintenance requirements,
- 39 iv. Inspection procedures,

- v. Ways to perform their job activities to prevent or minimize impacts to water quality, and
- vi. Procedures for reporting water quality concerns, including potential illicit discharges.

## **S7. TOTAL MAXIMUM DAILY LOAD ALLOCATIONS**

The following requirements apply if an applicable Total Maximum Daily Load (TMDL) is approved for stormwater discharges from MS4s owned or operated by the Permittee. Applicable TMDLs or applicable TMDL requirements are TMDLs ~~that which~~ have been approved by EPA and for which an approved Detailed Implementation Plan (DIP) has been adopted by Ecology on or before the issuance date of this permit, ~~or TMDLs which have been approved by EPA or~~ prior to the date that the Permittees application is received by Ecology. All Permittees must be in compliance with applicable TMDL requirements.

- A. For applicable TMDLs listed in Appendix 2, affected Permittees shall comply with the specific requirements identified in Appendix 2 in addition to the requirements of this permit. The status of the TMDL implementation must be included as part of the annual report submitted to Ecology for this Permit.
  - 1. Where monitoring is required in Appendix 2, the Permittee shall submit a Quality Assurance Project Plan (QAPP) to Ecology for review and approval, or, if available, conduct the monitoring according to a QAPP developed by Ecology.
- B. For applicable TMDLs not listed in Appendix 2, compliance with this permit shall constitute compliance with those TMDLs. Each Permittee shall keep records of all actions required by this permit that are relevant to applicable TMDLs within their jurisdiction. The status of the TMDL implementation must be included as part of the annual report submitted to Ecology for this permit.
- C. For TMDLs that are approved by EPA after this permit is issued, the Department may establish TMDL related permit requirements through future permit modification or when this permit is reissued. Permittees are encouraged to participate in development of TMDLs within their jurisdiction and to begin implementation. The Department may modify this permit to incorporate requirements from TMDLs completed after the issuance of this permit if the Department determines implementation of actions, monitoring or reporting necessary to demonstrate reasonable further progress toward achieving TMDL waste load allocations, and other targets, are not occurring and must be implemented during the term of this permit.

[Any monitoring required by a TMDL should not be considered part of the monitoring requirements in Section S8.]

## **S8. MONITORING**

The Permittees listed in S1.B, Port of Seattle and Port of Tacoma shall develop and implement a comprehensive long-term monitoring program. The monitoring program shall include ~~two~~three components:

Stormwater Monitoring, [This requirement should be removed from the permit. Justification for removal is presented in City of Tacoma's Cover Letter.

As stated in the Fact Sheet, this requirement is to gauge the comprehensive stormwater management programs progress towards reducing the amount of pollutants discharged. This is "Stormwater Management Program effectiveness monitoring" and thus should be included as part of the Stormwater Management Program effectiveness monitoring section if this requirement is not removed from the permit.]

Stormwater Management Program effectiveness monitoring

Stormwater Treatment and Hydrologic Management BMP evaluation monitoring.

The results of the monitoring program shall be used to support the adaptive management process and lead to refinements of the Stormwater Management Program. The monitoring program must include Quality Assurance Project Plans (QAPPs) for each monitoring objective, written in accordance with Ecology's QAPP guidelines at <http://www.ecy.wa.gov/biblio/0403030.html>. The monitoring program must be developed by qualified staff or contractors that have experience in applying Ecology's or EPA's QAPP Guidelines.

[Baseline QAPPs. The Ecology QAPP guidelines that are available are too general and open for interpretation that has led to many versions of a QAPP requiring months to years to get Ecology approvals.]

We recommend Ecology provide boiler plate QAPP(s) for stormwater and BMP effectiveness. In this way, Permittees will be using the same field and analytical methods, QA/QC, and report format and content. Permittees will produce equivalent data and similar report formats that can be easier to assess, review and share information throughout the region. The resulting data can be compared to other data.

The boiler plate QAPP should include:

- Objectives for each types of sampling: stormwater, receiving water, and BMP effectiveness.
- Minimum number of samples to be collected for each type of sample/analyses (i.e., benthic sampling once/year, quarterly stormwater sampling, ten or more storms per year for BMP effectiveness).
- Data quality objectives
- Field and analytical procedures
- Number of QA/QC samples to be collected
- Report format as listed in S6.A.5. including the following:
  - electronic data format requirements
  - a comprehensive data and QA/QC report format (see S6.A.5.c)
  - data evaluation (summary, statistics, trend analysis etc.)

Secondary Permittees other than Ports have no requirement for monitoring under this section during this permit term, however, in accordance with S6.F.3.c, they are required to

provide information, maps and access for sampling efforts, as necessary. Secondary Permittees are encouraged to participate in the monitoring program

A. Comprehensive Stormwater Management Program Effectiveness Monitoring  
1. Stormwater Monitoring

1. Stormwater monitoring site selection

- a. Adequate sites will have the tributary conveyance system and drainage area mapped, and is suitable for permanent installation and operation of flow-weighted composite sampling equipment.

- b. ~~Counties shall monitor one outfall or conveyance representing each of the following land uses:~~

- ~~i. Commercial,~~

- ~~ii. Low density residential, and~~

- ~~iii. High density residential.~~

- c. Permittees ~~Cities~~ shall monitor ~~one three outfalls outfall~~ or conveyances that comprehensively measure effectiveness of the Permittees SWMP conveyance representing each of the following land uses:

- ~~i. Commercial,~~

- ~~ii. High density residential, and~~

- ~~iii. Industrial.~~

[Tacoma recommends removing the requirement to sample 3 types of land uses. The primary objective of the monitoring program is to provide a feedback loop for adaptive management of the Permittees' programs. Tacoma recommends the flexibility to select outfalls that represent a comprehensive effectiveness measure of the SWMP.]

Isolation of land use types is impractical. Many of Tacoma's drainage basins would not meet the requirement of 80% or more of a particular land use. In our Thea Foss Basin where we use the end of outfall stormwater sampling as a measure of our comprehensive stormwater program effectiveness, four of the seven outfalls are mixed land uses and do not meet this requirement (Outfalls 237A, 237B, 230, and 235). Three of the seven outfalls would meet commercial/warehouse/ industrial land use. Thea Foss drainage basins sizes range from a few acres to 2,800 acres. A large basin would be a more representative measure of the comprehensive SWMP effectiveness but one could not meet the representative land use. A smaller basin may represent the land use but would not measure the comprehensive SWMP effectiveness. It would represent maybe one to two structural BMPs and maybe a handful of business inspections. It is Tacoma's opinion that this would not be representative of the comprehensive stormwater management program.

A measure of representative land use and effectiveness of the SWMP for that land use can be identified by the Permittee under S8.B to meet the requirement "to determine the

effectiveness of the **Permittee's** SWMP at controlling a stormwater related problem directly addressable by actions in the SWMP".]

d. The Ports of Seattle and Tacoma shall each monitor one outfall or conveyance.

2. Stormwater monitoring frequency and type of sampling shall be as follows:

a. Each stormwater monitoring site shall be sampled according to the following frequency:

i. ~~75% of the qualifying storms~~ Up to a maximum of ~~15-10~~ storm events per year, with sampling distributed throughout the year, ~~reflecting the 80%/20% distribution of rainfall between with 8~~ the wet season events and 2 dry seasons events as follows:

(1) ~~75% of the Q~~qualifying storms during the wet season, from October 1 through April 30 ~~are. A wet season storm event is~~ defined as follows:

- Rainfall volume ~~0.100.20"~~ minimum  
No fixed maximum
- Rainfall duration 2 times the time of concentration for the basin~~No fixed~~ minimum up to a 24 hour~~or~~ maximum
- Antecedent dry period less than 0.02" rain fall in the previous 24 hours
- Inter-event dry period a minimum of 2 weeks separation between stormwater sampling events and measured rainfall amounts that are greater than 6 hours apart are considered separate storm events and samples from these events will not generally be composited as a single event~~6 hours~~

(2) ~~75% of the Q~~qualifying storms during the dry season, from May 1 through September 30. ~~A dry season storm event is~~are defined as follows:

- Rainfall volume ~~0.1020"~~ minimum  
No fixed maximum
- Rainfall duration 2 times the time of concentration for the basin~~No fixed~~ minimum up to a 24 hour~~or~~ maximum
- Antecedent dry period less than 0.02" in the previous 72 hours
- Inter-event dry period a minimum of 2 weeks separation between stormwater sampling events and measured rainfall amounts that are greater than 6 hours apart are considered separate storm events and samples from these events will not generally be composited as a single event~~6 hours~~

[Tacoma recommends a minimum of 2 weeks separation between stormwater sampling events. If the events are collected back to back, the data is clustered and each data point may not represent a unique and individual concentration and may actually represent the same concentration. This would statistically skew the data and not be representative of unique and individual storm event concentrations. Pollutants build-up on surfaces in the basin between storm events. If 2 samples are collected back to back, the pollutants are not able to build on the surfaces before the next event. Again the second event would not be a unique and individual data point.]

From 2001 to 2004, the number of 0.2" storm events per year was 23, 17, 30, and 25 respectively. The number of events sampled was 13, 11, 16, and 15. Of those events not sampled, a majority occurred within 2 weeks of the events sampled. Only one or two events were missed each year. Only 9 to 12 storms were sampled each year at each outfall. In the tidally influenced outfalls, only 7 to 10 storms were sampled each year.

It is Tacoma's experience that 0.1 "of rainfall produces little runoff and discharge from our outfalls. The Foss Program minimum rainfall is 0.2". A fixed rainfall minimum and maximum should also be identified. A fixed minimum duration should be 2 times the time of concentration for the outfall/sampling location. Time of concentration is the time for rainfall to travel from the furthest upstream location to the discharge point. That is, the sample should represent runoff quality from the entire basin and not just representing the stormwater quality from the area immediate upstream of the location.

Tacoma recommends sampling a maximum of 24 hours for any event. In general, a majority of the pollutants are believed to be "washed off" in the beginning portion of a storm. Any concentration in an event greater than 24 hours would be dilute in comparison to the first 24 hours. Sampling events greater than 24 hours would probably require additional field work to change jars, ice the samples and to change batteries on the sampling units.

Samples should be collected and preserved in a timely manner to protect sample integrity and to meet holding time requirements for the parameters to be measured. Sampling longer than 24 hours would compromise sample integrity and may result in samples that exceed holding times.]

- b. Each storm event shall be sampled using flow-weighted composite storm sampling, represent no less than 75 percent of the total volume of the storm or the first 24 hours, which ever is less for the full duration of the storm event, and for the constituents/parameters listed below. Chemicals that are below detection limits after two years of data may be dropped from the analysis.

[Sampling the full duration of a storm event is very difficult due to the variability of rain events. Sampling programs are set based on rainfall forecast which are never accurate. The difference between the forecast and actual events usually results in sampling of a portion of the event. In particular, if a small event is predicted and the actual event is 2 to 3 times larger the sampler jar will fill before the event is complete or the battery will run down. Tacoma's Foss Program requires sampling at least 75 percent of the hydrograph. This criteria has resulted in a successful program. If Tacoma was required to sample the

full duration, 75 percent of our samples are not the full hydrograph but are still believed to representative of the pollutant concentrations on stormwater.]

- i. Rainfall event data including antecedent dry period and rainfall
- ii. Flow and, Hydrograph data including antecedent dry period, rainfall and total and sampled runoff volume,
- ~~ii~~.iii. TSS and turbidity,
- ~~iii~~.iv. Conductivity if tidally influenced,
- ~~iv~~.v. Chloride,
- ~~v~~.vi. Metals including, at a minimum, total and dissolved copper, zinc, cadmium, and lead; and mercury sampling in commercial and industrial land use areas,
- ~~vi~~.vii. Hardness,
- ~~vii~~.viii. PAHs associated with vehicles, roads and parking lots; phthalates
- ~~viii~~.ix. Pesticides including:
  - Herbicides: 2,4-D, MCP, Dichlobenil, Prometon, Triclopyr,
  - Insecticides: Diazinon, Malathion, Chlorpyrifos
  - Fungicides: Pentachlorophenol

[Insufficient Rationale for Pesticides Monitoring. Sufficient rationale has not been provided to support a requirement for monitoring herbicides, insecticides, and fungicides. A majority of these constituents do not have EPA recommended water quality criteria (EPA, 2002). It has not been convincingly demonstrated that these constituents have caused significant toxic effects to aquatic life in local receiving waters, and we are not aware of instances where these constituents have been placed on 303(d) lists within the permit area. The inherent toxicities of these chemicals vary by many orders of magnitude (Environment Canada, 2002; USGS, 1997), but most are degraded fairly quickly, with environmental half lives typically measured in weeks (Syracuse Research Corp; www.syrres.com/esc/efdb.htm). Furthermore, several analytical methods (potentially including EPA Methods 8141, 8151, and 8270) and thus several sample volumes may be required for analysis, 1 up to 3 liters for QA/QC. Ecology needs to better assess the environmental significance of these chemicals by considering their toxicity, frequency of use, environmental occurrence, environmental fate and persistence, analytical constraints, and the availability and reliability of water quality criteria, before imposing these chemicals on routine NPDES monitoring programs. The municipal Permittees should not be expected to conduct basic research on equivocal chemicals.]

~~ix~~.x. Nutrients including total nitrogen, phosphorus, nitrate/nitrite and orthophosphate,

~~x~~.xi. Biochemical oxygen demand (BOD), and

- c. Toxicity testing of a “seasonal first-flush” storm event defined as an event in August or September, with at least a 1 week antecedent dry period. Required test is the Daphnid acute test, *Ceriodaphnia dubia* or *Daphnia pulex* (48-hour static test, method: EPA-821-R-02-012).

[Toxicity testing of the seasonal first flush storm event may be limited by the availability of laboratories that do toxicity testing (i.e., limited supply of critters for testing, synergistic effect of everyone sampling for the same storm). To reduce the overall number of toxicity tests on the same storm event, each Permittee could identify 20 percent of the outfall samples to be toxicity tested in the first year and rotate the sites selected in the following years.]

The list of parameters above requires a fair amount of volume. Collecting enough volume of stormwater for analyses can be a difficult task. The list of parameters should be prioritized for situations when enough sample volume is not achieved. 6 liters of water are required to analyze all the parameters listed in the permit. For QA/QC samples, the volume would need to be 12 to 18 liters. With the difficulties in predicting storm events and programming to collect enough volume based on the weather predictions, it will be very difficult to collect sufficient volumes of water for all the analyses and QA/QC. Does the wording as appropriate for the monitoring objective cover prioritizing parameters based on available sample volumes? ]

- d. Permittees shall make a reasonable attempt to collect grab samples ~~Each storm event shall be sampled using grab samples~~ for the following constituents/parameters:
- i. Total Petroleum Hydrocarbons (TPH) using NWTPH-Gx and NWTPH-Dx. (sample must be collected early in the storm event and skimmed from the surface), and
  - ii. Fecal coliform bacteria. [What is the purpose of this parameter? Fecal coliform is omni present in stormwater and almost always exceeds water quality standards by orders of magnitude. A more useful indicator of health risk is needed. Please consider using another parameter instead.]

[It is Tacoma’s experience that a majority of the stormwater events occur in the early hours of the day ( 1-5 AM). Grab samples are difficult to collect late at night and during the first part of the storm event. It may not be safe for the sampling crew or person at the sampling location late at night. Grab samples should be noted as “Make a reasonable attempt to collect grab samples”.]

- e. Sediments will be collected and analyzed for percent solids, total organic carbon, metals, PAHs, phthalates, phenolics and PCBs at all sites in the system proposed for monitoring. Chemicals that are below detection limits after two years of data may be dropped from the analysis. ~~A minimum of 1 independent sample, up to a maximum of 3 independent samples~~ per year should be collected. Use of in-line sediment traps or similar collection system is

preferred. Sampling of sediment deposits is an alternative where approved by the department.

The sediment traps are a useful tool for source tracing given the following considerations:

- Traps are installed at the end of the pipe in an attempt to represent the cumulative effect of sources in that particular drainage area.
- Traps are left in-place for an extended period of time (3 to 6 months) and collect data from a variety of storms (i.e., a range of volume, duration and intensity conditions).

It is inappropriate, however, to evaluate sediment trap data using sediment quality criteria because storm drains provide neither habitat nor point of compliance for aquatic life.

[The Foss Program collects 1 sediment trap sample per year. The sample is collected during the wet season from September through March. In that period, there is only enough sample collected in the traps for the list of analytes. Since the sediment-traps only accumulate sediment during rain events, most of which occur during the wet season, the traps can not accumulate sediment in the remaining dry season of the year when there is little to no rainfall. Thus, it is impossible to collect 3 independent samples per year.]

[Methods and reporting limits should be specified for each parameter and matrix. This would help generate consistent data amongst all sampling programs. There are a variety of reporting limits for each of the parameters above. Specific limits could be identified in a Baseline QAPP as mention previously in the comments. Which limits should be used?]

3. The objective of the comprehensive stormwater monitoring is to measure and track long term trends in annual and seasonal pollutant loading of stormwater discharges. ~~A QAPP is required for the stormwater monitoring program.~~ [Repetitive] For each stormwater monitoring site, calculate the Event Mean Concentrations (EMCs), total annual pollutant load and the seasonal pollutant load for the wet and dry seasons. The loadings shall be expressed as total pounds and as pounds per acre, and must take into account potential pollutant load from base flow. This data is generated solely for the purposes of long term trend analysis to be used as a measure of the comprehensive effectiveness of the Permittee's SWMP in conjunction with other qualitative measures (i.e., such as inspections, illicit connection removal, complaint/spill response, public education, redevelopment, maintenance, and other municipal programs).

[The monitoring program quantitative measures alone may or may not show the true effectiveness through long-term outfall monitoring. Qualitative measures also need to be incorporated as a measure of program effectiveness (i.e., such as inspections, illicit connection removal, complaint/spill response, public education, redevelopment, maintenance, and other municipal programs).

The permit requirements focus on the effectiveness and operational application of the Stormwater Management Program. However, there are many factors that can affect trends that the Permittee has no control over, for example, increased traffic/urbanization and, global atmospheric deposition. The monitoring program seems to imply that

stormwater runoff is sole source that affects receiving water quality. For the most part, there is not a clear understanding on the cause and effect relationship between cumulative discharges [municipal stormwater, direct discharges (private stormwater, adjacent land owners, vessels, and wildlife), groundwater, atmospheric, etc] and receiving waters. There also needs to be recognition of upstream, boundary, baseline or natural conditions that are water quality impaired and are beyond the control of the Permittee.

The generation of EMCs and pollutant loading for stormwater needs to be qualified as.....what does a pollutant load mean at this site,...relative to what.... How do you know if this is good or bad? S8.A.3 as written above does not provide the context for which the data is to be used.]

B. Targeted Stormwater Management Program Effectiveness Monitoring

1. Each Permittee and the Ports of Seattle and Tacoma shall conduct monitoring designed to determine the effectiveness of the Permittee's SWMP at controlling a stormwater related problem directly addressable by targeted actions in the SWMP. Each Permittee and the Ports of Seattle and Tacoma shall develop and implement a monitoring program designed to answer one of each type of the following questions, at minimum 2 questions must be addressed:
  - a. The effectiveness of a targeted action (or narrow suite of actions), and
  - b. The effectiveness of achieving a targeted environmental outcome.
2. The monitoring shall at a minimum include either stormwater or receiving water monitoring of physical, chemical and/or biological characteristics. The monitoring may also include evaluation of regulatory processes, programmatic actions or other similar evaluations.
3. For each of the 2 questions selected for monitoring, the Permittee must develop a monitoring program containing the following elements:
  - a. Statement of the problem selected and explanation of why the problem is significant to the Permittee, and if the problem is significant to other stormwater managers;
  - b. Specific hypotheses about the problem or management actions that will be tested by the monitoring problem;
  - c. Specific parameters of attributes to be measured;
  - d. A QAPP written in accordance with Ecology's QAPP guidelines
  - e. Expected modifications to management actions depending on the outcome of hypotheses testing.

C. Stormwater Treatment and Hydrologic Management Best Management Practice (BMP) Evaluation Monitoring

[The City of Tacoma estimates the cost of BMP Evaluation Monitoring to be approximately \$1.8 million dollars. This type of monitoring will not provide information useful for improving water quality and therefore Tacoma will not be able justify this cost to rate payers. Tacoma requests that this requirement be removed as a permit condition.]

Additional information on the effectiveness of the traditional on-site BMPs as listed in the 2005 Manual and the preliminary draft permit may be needed. However this requirement should not be a condition of the permit. A coordinated effort under Ecology would be the best use of Phase I and II resources to evaluate effectiveness of these BMPs.

An advisory committee of Phase I and II jurisdictions should be formed to identify what BMP's need further evaluation above and beyond that already done by others locally as well as nationally. A third party could conduct the monitoring or each participant could monitor one or more of the sites as a coordinated effort. QAPPs should be developed and approved by the committee to guarantee the quality of data produced.

The committee and process could be similar to the current TRC. Information from the studies would then be used by the committee to improve the design requirements in Ecology's 2005 Manual.]

~~4.~~ Each Permittee listed in S1.B and the Ports of Seattle and Tacoma shall conduct full scale field monitoring to evaluate the effectiveness and operation and maintenance requirements of stormwater treatment and hydrologic management BMPs applied in their jurisdiction. A QAPP is required for each BMP and flow reduction strategy being monitored.

~~2.1.~~ Each Permittee listed in S1.B shall monitor at least 2 treatment BMPs, at no less than 2 sites per BMP. The Ports of Seattle and Tacoma shall each monitor at least 1 treatment BMP, at 2 sites. BMPs shall be selected from the following list:

a. BMP treatment types:

i. Basic Treatment

- (1) Biofiltration swale
- (2) Filter strip
- (3) Basic wetpond
- (4) Treatment wetland
- (5) Sand filter

ii. Metals/Phosphorus Treatment

- (1) Amended sand filter
- (2) Two facility treatment train
- (3) Compost amended filter strips
- (4) Bioretention
- (5) Large wetpond

iii. Oil Control

(1) Linear sand filter

(2) Catch basin insert

b. BMPs shall be designed in accordance with the 2005 Stormwater Management Manual for Western Washington unless Ecology approves of an alternate design in the QAPP review. Permittees may also petition Ecology to monitor a BMP that is not on the above list that they wish to evaluate as a potential option for common use in their jurisdiction.

c. Permittees shall prepare QAPPs consistent with Ecology (guidelines available at: <http://www.ecy.wa.gov/biblio/0403030.html>) and shall use appropriate sections of “Guidance for Evaluating Emerging Stormwater Treatment Technologies” (Publication Number 02-10-037) - or its updated version if published before the issuance date of this permit – including the “Technology Assessment Protocol-Ecology” (TAPE) for preparing, implementing, and reporting on the results of the BMP evaluation program. The statistical goal is to determine mean effluent concentrations and mean percent removals for each BMP type with 95% confidence and 80% power. However, a maximum of 35 influent and effluent sample pairs will suffice.

Permittees shall use USEPA publication number 821-B-02-001 , “Urban Stormwater BMP Performance Monitoring,” as additional guidance for preparing the BMP evaluation monitoring, and shall collect information pertinent to fulfilling the “National Stormwater BMP Data Base Requirements” in section 3.4.3. of that document.

d. Parameters to be monitored in whole water at each test site for Basic, Enhanced, or Phosphorus treatment BMP’s include:

i. Total suspended solids

ii. Particle size distribution - Four samples per year [fact sheet Appendix C identifies this as only 4 times per year not per sample]

iii. pH

iv. Total and ortho-phosphorus

v. Hardness

vi. Total and dissolved copper and zinc

e. Parameters to be monitored in whole water at test sites for Oil Control BMP’s include:

i. Total suspended solids

ii. Particle size distribution

iii. pH

iv. NWTPH-Dx and -Gx

v. Visible sheen

- f. Parameters to be monitored in accumulated sediment at each test site for Basic, Enhanced, Phosphorus treatment, or Oil Control BMP's include:
  - i. Percent total solids
  - ii. Grain size
  - iii. Total volatile solids
  - iv. NWTPH-Dx
  - v. Total cadmium, copper, lead, and zinc
  - vi. Total phosphorus

3-2. Each Permittee listed in S1.B. shall monitor the effectiveness of 1 flow reduction strategy that is in use or planned for installation in their jurisdiction.

Monitoring of a flow reduction strategy shall include continuous rainfall and surface runoff monitoring. Flow reduction strategies shall be monitored through either a paired site study or against a predicted outcome.

#### D. Monitoring Program Development

1. The Permittees listed in S1.B and the Ports of Seattle and Tacoma may choose to develop 1, 2 or all of the components of the monitoring program, conduct the monitoring, and report results through an integrated, long-term, water quality monitoring program in collaboration with other municipal stormwater Permittees; or they may independently develop 1, 2 or all of the components of the monitoring program, conduct the monitoring, and report results.

A collaborative monitoring program may be developed by a third party (or parties) that are not a Permittee, provided that the Permittee complies with the provisions of Special Condition S3.B (relying on another entity to meet permit requirements).

2. All QAPPs must be submitted to Ecology, for review, in accordance with the deadlines below. QAPPs for S8.A, Stormwater Monitoring, and S8.C., Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring Program must be reviewed and approved by Ecology prior to monitoring.

#### E. Monitoring Program Deadline

1. The deadlines for collaborative, integrated monitoring program are as follows:
  - a. Permittees that intend to meet all or part of the monitoring requirements through a collaborative process must submit a statement to Ecology explaining their commitment to the collaborative process no later than 1 year after the effective date of this permit
  - b. The summary description of the monitoring program and QAPPs, as required, shall be submitted to Ecology no later than 2 years after the effective date of this permit. The monitoring program shall be submitted in both paper and electronic form.

- c. Approved or final QAPPs must be completed no later than 2.5 years after the effective date of this permit.
- d. Full implementation of the stormwater and receiving water monitoring program shall begin no later than 3 years after the effective date of this permit. The third party or parties selected to develop the monitoring plan may continue to be utilized to collect and analyze the data and to write the subsequent reports required under this permit.
- e. Data collection ~~and analysis~~ for S8.C. ~~Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring Program~~ must be complete and ~~submitted to Ecology~~ no later than ~~4.5~~ years from the effective date of this permit. Analysis will be completed 90 days after receipt of the last laboratory data package and submitted to Ecology in the Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring Program Report.

[Monitoring for 35 paired storm events will take at least 2 years. Tacoma's Foss Program states that the laboratory data report must be submitted 45 days after sample collection. The data report is due 90 days after receipt of the last data report for that year, allowing 4½ months from collection of the last storm event to submittal of the report]

- 2. The deadlines for an independently developed monitoring program are as follows:
  - a. A summary description of the monitoring program and QAPPs, as required, shall be submitted to Ecology no later than 1 year after the effective date of this permit. The monitoring program shall be submitted in both paper and electronic form.
  - b. Approved or final QAPPs must be completed no later than 1.5 years after the effective date of this permit.
  - c. Full implementation of the stormwater and receiving water monitoring program shall begin no later than 2 years after the effective date of this permit.
  - d. Data collection ~~and analysis~~ for S8.C. ~~Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring Program~~ must be complete and ~~submitted to Ecology~~ no later than ~~4.5~~ years from the effective date of this permit. Analysis will be completed 90 days after receipt of the last laboratory data package and submitted to Ecology in the Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring Program Report .

[Monitoring for 35 paired storm events will take at least 2 years. Tacoma's Foss Program states that the laboratory data report must be submitted 45 days after sample collection. The data report is due 90 days after receipt of the last data report for that year, allowing 4½ months from collection of the last storm event to submittal of the report]

#### F. Monitoring Program Reporting Requirements

Tacoma recommends that the monitoring report be based on the calendar year and due at same time as the annual report. The due date for both of these reports should be May 15.

For a monitoring report, it is not important that monitoring be conducted (and started) on a water year. Tacoma also believes that the Stormwater Monitoring component should be conducted on same reporting period (either calendar or water year) for all jurisdictions.

Regardless of whether Stormwater monitoring (and other) conducted on a calendar or wet year basis, there needs to be sufficient time to receive and QA lab data, analyze data, write the draft report, and complete internal reviews. If a Permittee collects a storm sample on September 30, the due date has to be changed to allow time for the Permittee to get the analytical data back from the lab. It usually takes 30 to 45 days to get data back from the lab. Data evaluation can not be completed until the Permittee has all the data at hand. Tacoma's Foss Program states that the laboratory data report must be submitted 45 days after sample collection. The data report is due 90 days after receipt of the last data report for that year, allowing 4½ months from collection of the last storm event to submittal of the report.

If the reporting period is based on the Water Year, Tacoma's report submittal to Ecology is February 15. If the reporting period is based on the calendar year, Tacoma's report submittal to Ecology is May 15.

1. The stormwater monitoring report shall be submitted by ~~December 31~~ February 15 or May 15 [depending on water year vs. calendar year] each year, beginning in 2009 for independent monitoring, and 2010 for collaborative monitoring. Each report shall include all monitoring data collected during the preceding period from October 1 through September 30. Each report shall also integrate data from earlier years into the analysis of results, as appropriate. Permittees that choose to participate in an integrated water quality monitoring program shall submit a single integrated monitoring report. Reports shall be submitted in both paper and electronic form and shall include:
  - a. Stormwater Monitoring Reporting
    - i. A summary including the location, land use, drainage area size, and hydrology for each site,
    - ii. A comprehensive data and QA/QC report for each part of the monitoring program, with an explanation and discussion of the results of each monitoring project,
    - iii. The annual pollutant load for each site expressed in total pounds, and pounds/acre, and
    - iv. The wet and dry season pollutant loads, expressed in total pounds, and pounds/acre.

The generation of EMCs and pollutant loading for stormwater needs to be qualified as.....what does a pollutant load mean at this site,...relative to what.... How do you know

if this is good or bad? S8.A.3 as written above does not provide the context for which the data is to be used.]

- b. Stormwater Management Program Effectiveness Monitoring Reporting
  - i. A summary of the purpose, design, and methods of the monitoring program,
  - ii. The status of implementing the monitoring program,
  - iii. A comprehensive data and QA/QC report for each part of the monitoring program, with an explanation and discussion of the results of each monitoring project,
  - iv. An analysis of the results of each part of the monitoring program, including any identified water quality problems or improvements or other trends in stormwater or receiving water quality, and
  - v. Recommended future actions based on the findings.
- c. Stormwater Treatment and Hydrologic Management Best Management Practice (BMP) Evaluation Monitoring Reporting
  - i. A summary including the BMP type location, land use, drainage area size, and hydrology for each site.
  - ii. The status of implementing the monitoring program,
  - iii. A comprehensive data and QA/QC report for each part of the monitoring program, with an explanation and discussion of the results of each monitoring project,
  - iv. Performance data or flow reduction performance. Performance data for treatment BMPs shall be reported consistent with:
    - (1) The guidelines in appropriate sections of “Guidance for Evaluating Emerging Stormwater Treatment Technologies” (Publication Number 02-10-037) - or its updated version if published before the issuance date of this permit – including the “Technology Assessment Protocol-Ecology (TAPE), and
    - (2) USEPA publication number 821-B-02-00, “Urban Stormwater BMP Performance Monitoring,” including information pertinent to fulfilling the “National Stormwater BMP Data Base Requirements” in section 3.4.3. of that document.
- d. Monitoring Cost Reporting. Report the cost of development and implementation of the monitoring program including the preparation of monitoring plans, sample collection, sampling equipment, laboratory analysis, data analysis and reporting.

- 2. If the Permittee monitors any pollutant more frequently than required by the required monitoring program, then the results of this monitoring shall be included in the report. If the Permittee conducts any other stormwater monitoring in addition to

that required in the required monitoring program, then it shall provide a description of the additional monitoring in the report.

### **S9. REPORTING-REQUIREMENTS**

[Why have a separate monitoring report? If the calendar year is used, we suggest including the monitoring report as an appendix to the annual report, and adjusting the due date of the annual report to the end of April or May to allow time for the development of the monitoring information.]

[We also suggest combining the source control and illicit discharge reporting requirements.]

[The reporting process requires that expenditures be reported including costs of the various components of the stormwater management program.]

Currently Tacoma's financial program does not have the ability to track stormwater activities outside of the surface water program. The proposed permit requirements would include budget and expenditure categories for permit activities across multiple Public Works, Tacoma Public Utilities and General Government offices. Tacoma would like to submit a high-level expenditure summary for the stormwater management program and then spend more time on other, more fruitful efforts to improve surface water quality.

What is important is how each **Permittee** meets its permit requirements and this is described in the annual report. As a tool to measure how each **Permittee** is meeting the permit requirements, the actual activities completed are the most important and the actual amount spent is secondary, especially considering the difficulty of accurately collecting the actual dollars spent.

Another concern is how Ecology will compare one budget to another. Each **Permittee** will use their own budget assumptions resulting in budgets that will be quite different. These differences could result in the comparison of "apples to oranges" which will not be useful for either Ecology or the public.

The permit should require that basic budget information be included in the annual report for the reporting year as well as the proposed budget for the upcoming year.]

[Ecology should require the same reporting format for Phase I and Phase II **Permittees**. This will make the reports more useful to the public.]

- A. Each Permittee, Co-Permittee and secondary Permittee shall submit, no later than March 31 of each year beginning in the year 2008, an annual report. The reporting period for each annual report shall be the previous calendar year.
- B. The annual report shall include the following information:
  1. Status of compliance with the conditions of this permit, including the status of implementing the components of the stormwater management program, and the implementation schedule. If permit deadlines are not met, Permittees, Co-

Permittees and secondary Permittees shall report the reasons why the requirement was not met and how the requirements will be met in the future, including projected implementation dates. A comparison of program implementation results to performance standards established in this permit shall be included for each program area.

2. Notification of any recent or proposed annexations or incorporations resulting in an increase or decrease in permit coverage area, and implications for the stormwater management program

3. Expenditures for the reporting period, with a breakdown for the components of the stormwater management program.

4. A summary describing compliance activities, including the nature and number of official enforcement actions, inspections, and types of public education activities; and

5. Identification of known water quality improvements or degradation.

C. Report Format

Each Permittee, Co-Permittee or secondary Permittee shall use the attached reporting forms, in Appendices 3 and 4. Each Permittee shall complete the applicable form in its entirety. Two copies of the annual report shall be submitted to Ecology. In addition, an electronic copy of the report, in pdf format, shall be submitted to Ecology

## GENERAL CONDITIONS

[Suggest adding order of preference language in case a conflict occurs between Special and General Conditions. The language would indicate which one would apply.]

[These sections should be rewritten to reflect a surface water permit, rather than a wastewater permit. It appears that much of the verbiage was taken from wastewater permits and included here and does not clearly reflect the focus of this permit.]

### **G1. DISCHARGE VIOLATIONS**

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit.

### **G2. PROPER OPERATION AND MAINTENANCE**

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment, and control (and related appurtenances) which are installed or used by the Permittee for pollution control to achieve compliance with the terms and conditions of this permit.

### **G3. NOTIFICATION OF SPILL**

If a Permittee has knowledge of a spill into a municipal storm sewer which could constitute a threat to human health, welfare, or the environment, the Permittee shall notify the Ecology regional office and other appropriate spill response authorities immediately but in no case later than within 24 hours of obtaining that knowledge. Spills which might cause bacterial contamination of shellfish, such as might result from broken sewer lines, shall be reported immediately to the Department of Ecology and the Department of Health, Shellfish Program. The Department of Ecology's Regional Office 24-hr. number is 425 649-7000 for NWRO and 360 407-6300 for SWRO and the Department of Health's Shellfish 24-hr. number is 360-236-3330.

### **G4. BYPASS PROHIBITED**

The intentional *bypass* of stormwater from all or any portion of a stormwater treatment BMP whenever the design capacity of the treatment BMP is not exceeded, is prohibited unless the following conditions are met:

- A. Bypass is: (1) unavoidable to prevent loss of life, personal injury, or severe property damage; or (2) necessary to perform construction or maintenance-related activities essential to meet the requirements of the Clean Water Act (CWA); and
- B. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated stormwater, or maintenance during normal dry periods.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss.

## **G5. RIGHT OF ENTRY**

The Permittee shall allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law at reasonable times:

- A. To enter upon the Permittee's premises where a discharge is located or where any records must be kept under the terms and conditions of this permit;
- B. To have access to, and copy at reasonable cost and at reasonable times, any records that must be kept under the terms of the permit;
- C. To inspect at reasonable times any monitoring equipment or method of monitoring required in the permit;
- D. To inspect at reasonable times any collection, treatment, pollution management, or discharge facilities; and
- E. To sample at reasonable times any discharge of pollutants.

## **G6. DUTY TO MITIGATE**

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

## **G7. PROPERTY RIGHTS**

This permit does not convey any property rights of any sort, or any exclusive privilege.

## **G8. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in the permit shall be construed as excusing the Permittee from compliance with any other applicable federal, state, or local statutes, ordinances, or regulations.

## **G9. MONITORING [This information should be in the QAPPs, and doesn't need to be spelled out here. What if a QAPP varies from the verbiage in G9? This section also contains a lot of wastewater verbiage that doesn't apply to a stormwater permit.]**

### **A. Representative Sampling:**

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored discharge, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

1 B. Records Retention:

2 The Permittee shall retain records of all monitoring information, including all  
3 calibration and maintenance records and all original recordings for continuous  
4 monitoring instrumentation, copies of all reports required by this permit, and records of  
5 all data used to complete the application for this permit, for a period of at least five  
6 years. This period of retention shall be extended during the course of any unresolved  
7 litigation regarding the discharge of pollutants by the Permittee or when requested by  
8 Ecology. On request, monitoring data and analysis shall be provided to Ecology.

9 C. Recording of Results:

10 For each measurement or sample taken, the Permittee shall record the following  
11 information: (1) the date, exact place and time of sampling; (2) the individual who  
12 performed the sampling or measurement; (3) the dates the analyses were performed; (4)  
13 who performed the analyses; (5) the analytical techniques or methods used; and (6) the  
14 results of all analyses.

15 D. Test Procedures:

16 All sampling and analytical methods used to meet the monitoring requirements  
17 specified in the approved stormwater management program shall conform to the  
18 Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40  
19 CFR Part 136, unless otherwise specified in this permit or approved in writing by  
20 Ecology.

21 E. Flow Measurement:

22 Where flow measurements are required by other conditions of this Permit, appropriate  
23 flow measurement devices and methods consistent with accepted scientific practices  
24 shall be selected and used to ensure the accuracy and reliability of measurements of the  
25 volume of monitored discharges. The devices shall be installed, calibrated, and  
26 maintained to ensure that the accuracy of the measurements are consistent with the  
27 accepted industry standard for that type of device. Frequency of calibration shall be in  
28 conformance with manufacturer's recommendations or at a minimum frequency of at  
29 least one calibration per year. Calibration records should be maintained for a minimum  
30 of three years.

31 F. Lab Accreditation:

32 Where data collection is required by other conditions of this Permit, all monitoring  
33 data, except for flow, temperature, conductivity, pH, total residual chlorine, and other  
34 exceptions approved by Ecology, shall be prepared by a laboratory registered or  
35 accredited under the provisions of, Accreditation of Environmental Laboratories,  
36 Chapter 173-50 WAC. Soils and hazardous waste data are exempted from this  
37 requirement pending accreditation of laboratories for analysis of these media by  
38 Ecology.

39 G. Additional Monitoring:

40 Ecology may establish specific monitoring requirements in addition to those contained  
41 in this permit by administrative order or permit modification.

## **G10. REMOVED SUBSTANCES**

With the exception of decant from street waste vehicles, the Permittee shall not allow collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of stormwater to be resuspended or reintroduced to the storm sewer system or to waters of the state. Decant from street waste vehicles resulting from cleaning stormwater facilities may be reintroduced only when other practical means are not available and only in accordance with the Street Waste Disposal Guidelines in Appendix 6. Tacoma believes that Ecology has bypassed the regulatory process by demanding that street waste be disposed of only in accordance with the Street Waste Disposal Guidelines, which are merely suggested guidance and are not regulatory unless adopted as such by local jurisdictions.

## **G11. SEVERABILITY**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

## **G12. REVOCATION OF COVERAGE**

The director may terminate coverage under this General Permit in accordance with Chapter 43.21B RCW and Chapter 173-226 WAC. Cases where coverage may be terminated include, but are not limited to the following:

- A. Violation of any term or condition of this general permit;
- B. Obtaining coverage under this general permit by misrepresentation or failure to disclose fully all relevant facts;
- C. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;
- D. A determination that the permitted activity endangers human health or the environment, or contributes significantly to water quality standards violations;
- E. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090;
- F. Nonpayment of permit fees assessed pursuant to RCW 90.48.465;

Revocation of coverage under this general permit may be initiated by Ecology or requested by any interested person.

## **G13. TRANSFER OF COVERAGE**

The director may require any discharger authorized by this general permit to apply for and obtain an individual permit in accordance with Chapter 43.21B RCW and Chapter 173-226 WAC.

#### 1 **G14. GENERAL PERMIT MODIFICATION AND REVOCATION**

2 This general permit may be modified, revoked and reissued, or terminated in accordance  
3 with the provisions of WAC 173-226-230. Grounds for modification, revocation and  
4 reissuance, or termination include, but are not limited to the following:

- 5 **A.** A change occurs in the technology or practices for control or abatement of pollutants  
6 applicable to the category of dischargers covered under this general permit; [This  
7 terminology doesn't fit a general permit.]
- 8 **B.** Effluent limitation guidelines or standards are promulgated pursuant to the CWA or  
9 chapter 90.48RCW, for the category of dischargers covered under this general permit;  
10 [This is a wastewater term; recommend revising to reflect surface water.]
- 11 **C.** A water quality management plan containing requirements applicable to the category of  
12 dischargers covered under this general permit is approved; or
- 13 **D.** Information is obtained which indicates that cumulative effects on the environment  
14 from dischargers covered under this general permit are unacceptable.

15 The filing of a request by the Permittee for a permit modification, revocation and  
16 reissuance, or termination, or a notification of planned changes or anticipated  
17 noncompliance does not stay any permit condition.

#### 18 **G15. REPORTING A CAUSE FOR MODIFICATION OR REVOCATION**

19 A Permittee who knows or has reason to believe that any activity has occurred or will occur  
20 which would constitute cause for modification or revocation and reissuance under  
21 Condition G12 REVOCATION OF COVERAGE, G14 GENERAL PERMIT  
22 MODIFICATION AND REVOCATION, or 40 CFR 122.62 must report such plans, or  
23 such information, to Ecology so that a decision can be made on whether action to modify,  
24 or revoke and reissue this permit will be required. Ecology may then require submission of  
25 a new or amended application. Submission of such application does not relieve the  
26 Permittee of the duty to comply with this permit until it is modified or reissued.

#### 27 **G16. APPEALS**

- 28 **A.** The terms and conditions of this general permit, as they apply to the appropriate class  
29 of dischargers, are subject to appeal within thirty days of issuance of this general  
30 permit, in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.
- 31 **B.** The terms and conditions of this general permit, as they apply to an individual  
32 discharger, are appealable in accordance with Chapter 43.21B RCW within thirty days  
33 of the effective date of coverage of that discharger. Consideration of an appeal of  
34 general permit coverage of an individual discharger is limited to the general permit's  
35 applicability or nonapplicability to that individual discharger.
- 36 **C.** The appeal of general permit coverage of an individual discharger does not affect any  
37 other dischargers covered under this general permit. If the terms and conditions of this  
38 general permit are found to be inapplicable to any individual discharger(s), the matter

shall be remanded to ecology for consideration of issuance of an individual permit or permits.

D. Modifications of this permit are appealable in accordance with Chapter 43.21B RCW and Chapter 173-226 WAC.

#### **G17. PENALTIES**

40 CFR 122.41(a)(2) and (3), 40 CFR 122.41(j)(5), and 40 CFR 122.41(k)(2) are hereby incorporated into this permit by reference.

#### **G18. DUTY TO REAPPLY**

The Permittee must apply for permit renewal at least 180 days prior to the specified expiration date of this permit. An expired permit continues in force and effect until a new permit is issued or until Ecology cancels the permit. Only Permittees who have reapplied for coverage under this permit are covered under the continued permit.

#### **G19. CERTIFICATION AND SIGNATURE**

All applications, reports, or information submitted to Ecology shall be signed and certified.

A. All permit applications shall be signed by either a principal executive officer or ranking elected official.

B. All reports required by this permit and other information requested by Ecology shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to Ecology, and
2. The authorization specifies either an individual or a position having responsibility for the overall development and implementation of the stormwater management program. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

C. Changes to authorization. If an authorization under General Condition G19.B.2 is no longer accurate because a different individual or position has responsibility for the overall development and implementation of the stormwater management program, a new authorization satisfying the requirements of General Condition G19.B.2 must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a document under this permit shall make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons

directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations."

## **G20. RECORDS RETENTION**

Each Permittee is required to keep all records related to this Permit for at least five years.

## **G21. NON-COMPLIANCE NOTIFICATION**

In the event the Permittee is unable to comply with any of the terms and conditions of this permit, including discharges from the Permittees MS4 which may cause a threat to human health or the environment, the Permittee shall:

- A. Take appropriate action to correct or minimize the threat to human health or the environment or otherwise stop or correct the condition of noncompliance.
- B. Notify Ecology of the failure to comply with the permit terms and conditions within 30 days of becoming aware of the non-compliance.
- C. Notify Ecology immediately in cases where the Permittee becomes aware of a discharge from the Permittees MS4 which may cause or contribute to an eminent threat to human health or the environment.

## 1   **DEFINITIONS AND ACRONYMS**

2    “AKART” means All Known, Available, and Reasonable methods of prevention, control and Treatment.

3    “All known, available and reasonable methods of prevention, control and treatment” refers to the  
4    State Water Pollution Control Act, Chapter 90.48.010 and 90.48.520 RCW.

5    “Applicable TMDL” means a TMDL which has been approved by EPA on or before the issuance  
6    date of this Permit, or prior to the date that the Permittee’s application is received by Ecology, or  
7    prior to a modification of this Permit, whichever is later.

8    “Best Management Practices (BMPs)” means the schedules of activities, prohibitions of  
9    practices, maintenance procedures, and structural and/or managerial practices that when used  
10   singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to  
11   waters of Washington State.

12   “Bypass” means the diversion of stormwater from any portion of a stormwater treatment facility.

13   “CWA” means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act  
14   or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub.  
15   L. 95-217, Pub. L. 95-576, Pub. L. (6-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.

16   “Component” or “Program Component” means the elements of the stormwater management  
17   program listed in Special Condition S5Stormwater Management Program for Permittees or S6  
18   Stormwater Management Program for Co-Permittees and Secondary Permittees.

19   “Co-Permittee” means an owner or operator of a municipal separate storm sewer that has co-  
20   applied for permit coverage with another Permittee, and that is only responsible for permit  
21   conditions relating to the discharge for which it is operator. See also 40 CFR 122.26(b)(1).

22   “Discharge” for the purpose of this permit, unless indicated otherwise, refers to discharges from  
23   Municipal Separate Storm Sewers of the Permittees. See also 40 CFR 122.2.

24   “Entity” means another governmental body, or public or private organization, such as another  
25   Permittee, a conservation district, or volunteer organization.

26   “40 CFR” means Title 40 of the Code of Federal Regulations, which is the codification of the  
27   general and permanent rules published in the Federal Register by the executive departments and  
28   agencies of the federal government.

29   “General Permit” means a permit which covers multiple dischargers of a point source category  
30   within a designated geographical area, in lieu of individual permits being issued to each  
31   discharger.

32   “Heavy equipment maintenance or storage yard” means an uncovered area where any heavy  
33   equipment, such as mowing equipment, excavators, dump trucks, backhoes, or bulldozers are

washed or regularly maintained at an established heavy equipment washing facility, or where at least five pieces of heavy equipment are stored on a permanent basis.

“Illicit connection” means any man-made conveyance that is connected to a municipal separate storm sewer without a permit or other legal justification, excluding roof drains and other similar type connections designed to convey drainage, surface water and ground water. Examples of illicit connections include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the municipal separate storm sewer system.

“Illicit discharge” means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.

“Integrated Pest Management (IPM)” means a coordinated decision-making and action process that uses the most appropriate pest control methods and strategy in an environmentally and economically sound manner to meet agency programmatic pest management objectives. The elements of integrated pest management include:

(a) Preventing pest problems;

(b) Monitoring for the presence of pests and pest damage;

(c) Establishing the density of the pest population, that may be set at zero, that can be tolerated or correlated with a damage level sufficient to warrant treatment of the problem based on health, public safety, economic, or aesthetic thresholds;

(d) Treating pest problems to reduce populations below those levels established by damage thresholds using strategies that may include biological, cultural, mechanical, and chemical control methods and that must consider human health, ecological impact, feasibility, and cost-effectiveness; and

(e) Evaluating the effects and efficacy of pest treatments.

“Pest” means, but is not limited to, any insect, rodent, nematode, snail, slug, weed, and any form of plant or animal life or virus, except virus, bacteria, or other microorganisms on or in a living person or other animal or in or on processed food or beverages or pharmaceuticals, which is normally considered to be a pest, or which the director of the department of agriculture may declare to be a pest.

“Large Municipal Separate Storm Sewer System (Large MS4)” means all Municipal Separate Storm Sewers located in an incorporated place with a population of 250,000 or more, a County with unincorporated urbanized areas with a population of 250,000 or more, according to the 1990 decennial census by the Bureau of Census. See also 40 CFR 122.26(b)(4).

“Low Impact Development” (LID) means a stormwater management and land development strategy applied at the parcel and subdivision scale that emphasizes conservation and use of on-

1 site natural features integrated with engineered, small-scale hydrologic controls to more closely  
2 mimic pre-development hydrologic functions.

3 "Major Municipal Separate Storm Sewer Outfall" means a municipal separate storm sewer  
4 outfall from a single pipe with an inside diameter of 36 inches or more, or its equivalent  
5 (discharge from a single conveyance other than circular pipe which is associated with a drainage  
6 area of more than 50 acres); or for municipal separate storm sewers that receive stormwater from  
7 lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an  
8 outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its  
9 equivalent (discharge from other than a circular pipe associated with a drainage area of 12 acres  
10 or more). See also 40 CFR 122.26(b)(5).

11 "Maximum Extent Practicable (MEP)" refers to paragraph 402(p)(3)(B)(iii) of the federal Clean  
12 Water Act which reads as follows: Permits for discharges from municipal storm sewers shall  
13 require controls to reduce the discharge of pollutants to the maximum extent practicable,  
14 including management practices, control techniques, and system, design, and engineering  
15 methods, and other such provisions as the Administrator or the State determines appropriate for  
16 the control of such pollutants.

17 "Material Storage Facilities" means an uncovered area used on a permanent basis for outside  
18 storage of uncontained bulk materials (liquid, solid, granular, etc.) in piles, barrels, tanks, bins,  
19 crates, or other means.

20 "Medium Municipal Separate Storm Sewer System (Medium MS4)" means all Municipal  
21 Separate Storm Sewers (MS3s) located in an incorporated place with a population of more than  
22 100,000 but less than 250,000, or a county with unincorporated urbanized areas of more than  
23 100,000 but less than 250,000 according to the 1990 decennial census by the Bureau of Census.  
24 See also 40 CFR 122.26(b)(7).

25 "Municipal Separate Storm Sewer (MS3)" means a conveyance, or system of conveyances  
26 (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches,  
27 manmade channels, or storm drains):

28 (a) owned or operated by a state, city, town, borough, county, parish, district, association,  
29 or other public body (created by or pursuant to State Law) having jurisdiction over  
30 disposal of wastes, storm water, or other wastes, including special districts under State  
31 Law such as a sewer district, flood control district or drainage district, or similar entity, or  
32 an Indian tribe or an authorized Indian tribal organization, or a designated and approved  
33 management agency under section 208 of the CWA that discharges to waters of the  
34 United States;

35 (b) designed or used for collecting or conveying stormwater;

36 (c) which is not a combined sewer; and

37 (d) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40  
38 CFR 122.2.

1 “Municipal separate storm sewer system (MS4)” means all separate storm sewers that are  
2 defined as “large” or “medium” or “small” municipal separate storm sewer systems. See also  
3 40 CFR 122.26(b)(18)

4 "National Pollutant Discharge Elimination System" (NPDES) means the national program for  
5 issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and  
6 imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the  
7 Federal Clean Water Act, for the discharge of pollutants to surface waters of the state from point  
8 sources. These permits are referred to as NPDES permits and, in Washington State, are  
9 administered by the Washington Department of Ecology.

10 "Notice of Intent" (NOI) means the application for, or a request for coverage under this General  
11 Permit pursuant to WAC 173-226-200. See Appendix 5 for the NOI for this permit.

12 "Notice of Intent for Construction Activity," and "Notice of Intent for Industrial Activity" mean  
13 the application forms for coverage under the Construction Stormwater General Permit and the  
14 Industrial Stormwater General Permit.

15 “Outfall” means point source as defined by 40 CFR 122.2 at the point where a municipal  
16 separate storm sewer discharges to waters of the State and does not include open conveyances  
17 connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances which  
18 connect segments of the same stream or other waters of the State and are used to convey waters  
19 of the State.

20 “Physically Interconnected” means that one MS3 is connected to a second MS3 in such a way  
21 that it allows for direct discharges to the second system. For example, the roads with drainage  
22 systems and municipal streets of one entity are physically connected directly to a MS3 belonging  
23 to another entity.

24 “Process Wastewater” means any water which, during manufacture or processing, comes into  
25 direct contact with or results from the production or use of any raw material, intermediate  
26 product, finished product, by product, or waste product.

27 “Qualified Personnel” means someone who has had professional training in the aspects of  
28 stormwater management they are responsible for.

29 “RCW” means the Revised Code of Washington State.

30 "Runoff" see Stormwater.

31 “Secondary Permittee” is an operator of municipal separate storm sewer which is not a city, town  
32 or county. Secondary Permittees include special purpose districts and other public entities  
33 identified in S1D which operate municipal separate storm sewers.

34 "Shared Waterbodies" means waterbodies, including downstream segments, lakes and estuaries,  
35 that receive discharges from more than one Permittee.

- 1    "Stormwater" means stormwater runoff, snow melt runoff, and surface runoff and drainage.
- 2    "Stormwater Associated with Industrial and Construction Activity" means the discharge from
- 3    any conveyance which is used for collecting and conveying stormwater, which is directly related
- 4    to manufacturing, processing or raw materials storage areas at an industrial plant, or associated
- 5    with clearing grading and/or excavation, and is required to have an NPDES permit in accordance
- 6    with 40 CFR 122.26.
- 7    "Stormwater facilities regulated by the Permittee" means all known, permanent stormwater
- 8    treatment and flow control BMPs not owned by the Permittee, that discharge into municipal
- 9    separate storm sewers owned or operated by the Permittee.
- 10   "Stormwater Management Manual for Western Washington" means the 5-volume technical
- 11   manual (Publication Nos. 05-10-029 through 05-10-033) published by Ecology in February
- 12   2005.
- 13   "Stormwater Management Program (SWMP)" means a set of actions and activities designed to
- 14   reduce the discharge of pollutants from the regulated small MS4 to the maximum extent
- 15   practicable and to protect water quality, and comprising the components listed in S5 or S6 of this
- 16   Permit and any additional actions necessary to meet the requirements of applicable TMDLs.
- 17   "Urban/higher density rural sub-basins" means any sub-basin or portion thereof that is within or
- 18   proposed to be within the urban growth area (UGA), or any rural area sub-basin or portion
- 19   thereof, fifty percent or more of which is comprised of lots smaller than 5 acres in size.
- 20   "Waters of the State" includes those waters as defined as "waters of the United States" in 40
- 21   CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the
- 22   state" as defined in Chapter 90.48 RCW which includes lakes, rivers, ponds, streams, inland
- 23   waters, underground waters, salt waters and all other surface waters and water courses within the
- 24   jurisdiction of the State of Washington.
- 25   "Water Quality Standards" means Surface Water Quality Standards, Chapter 173-201A WAC,
- 26   Ground Water Quality Standards, Chapter 173-200 WAC, and Sediment Management Standards,
- 27   Chapter 173-204 WAC.

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